Term: ***Five years, commencing on the date of approval by the Delegated Decision Maker, as noted below.***

BC Timber Sales – Skeena Business Area

For operations within the Kalum Forest District, including areas in

- **the Nass Timber Supply Area**
- **the Kalum Timber Supply Area**
- **Tree Farm Licence 1**
- **Tree Farm Licence 41**

BCTS
BC Timber Sales
Skeena

BC Timber Sales – Skeena Business Area
200 – 5220 Keith Avenue
Terrace, BC
V8G 1LI
Phone: **250 638 5100** Fax: **250 638 5176**

Timber Sales Manager Signature: *- ORIGINAL SIGNED -*
Name: N. Parry, RPF
Date: *December 5, 2005*

Authorized RPF Signature: *- ORIGINAL SIGNED and SEALED -*
Name: M. P. Folkema, RPF
Date: *December 5, 2005*

Plan prepared by:
R. Brouwer, RPF
Northwest Timberlands

Authorized approval by Delegated Decision Maker: _____
Name: R Manwaring, RPF, Kalum Forest District
Date: _____

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APPENDIX A STOCKING STANDARDS TABLES A1

1 INTRODUCTION

BC Timber Sales ("BCTS") has prepared this Forest Stewardship Plan (FSP) for the areas to be managed under its operations within the Kalum Forest District. The FSP describes

1. the planned areas of interest (known as Forest Development Units or FDUs) that will contain harvesting and road activities, and
2. strategies and results for each FDU that are consistent with applicable legislation and objectives set by government.

The results and strategies must be measurable or verifiable: this will allow the Designated Decision Maker[1] to evaluate whether consistency with the objectives is being achieved. Within the FSP document, the description of each result or strategy will indicate whether it applies to all, some, or just one of the FDUs identified in the FSP.

Preparation of a Forest Stewardship Plan is a requirement of the *Forest and Range Practices Act* (FRPA), which was enacted on January 31, 2004. The FRPA and its associated regulations identify objectives and/or prescribe requirements for the following forest values:

- Soils
- Timber (including Forest Health)
- Wildlife
- Water
- Fish
- Biodiversity
- Cultural Heritage Resources
- Recreation Resources
- Resource Features
- Visual Quality
- Forage

1.1 Description of the Skeena Business Area of BC Timber Sales

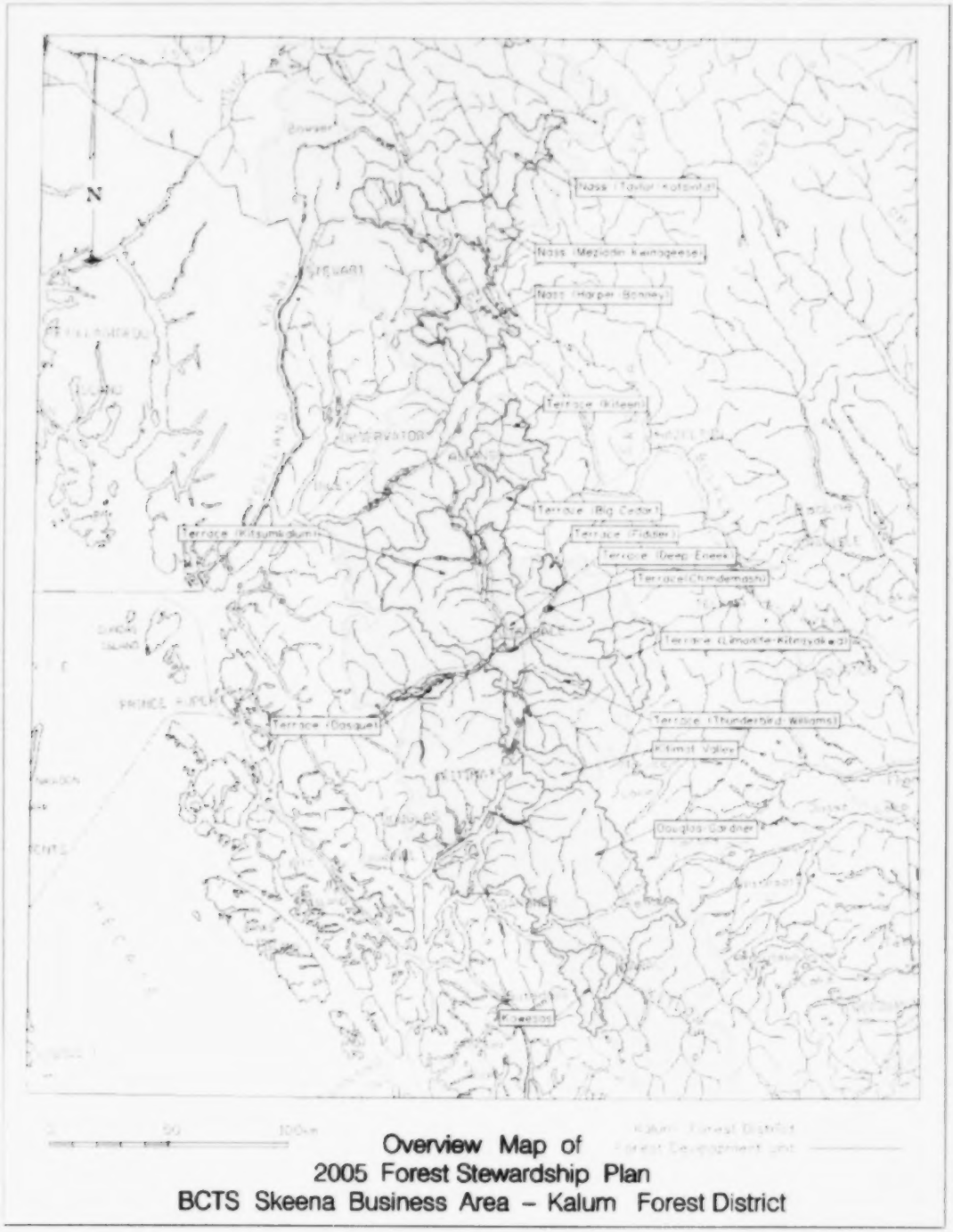
The Skeena Business Area of BC Timber Sales was formed in April 2003. This business unit encompasses the Kalum Forest District, the offshore portion of the North Coast Forest District, and the Kispiox, Cranberry, and Cassiar Timber Supply Areas. The bulk of these areas are within the NorthWest Mountain Pricing Unit: the exception is the North Coast area, which is in the Coastal Pricing Unit. The Skeena Business Area has its main office in Terrace, BC, with a field office in Hazelton, BC.

The total allowable annual cut (AAC) administered by the Skeena Business Area is 1,048,769 m^3. Within the Kalum Forest District, the AAC is 675,180 m^3.The BCTS operating areas are spread throughout the district, from Kotsinta Creek in the north to Hawkesbury Island in the south. In addition, significant area has been added as a result of the AAC takeback from large tenure holders as mandated by the *Forest Revitalization Act (2003)*.

The operating area covered by this FSP is restricted to the Kalum Forest District, and has been split into five (5) Forest Development Units (FDUs): Nass, Terrace, Kitimat Valley, Douglas-Gardner, and Kowesas (see Overview map). The FDU labels on the Overview map also identify sub-units of the FDUs: for example, the Kitsumkalum sub-unit of the Terrace FDU is shown as Terrace (Kitsumkalum). These sub-units are referenced within the FSP to assist in defining where certain strategies or results apply. The sub-units do not have any legal standing under this FSP or under the FRPA.

[1] For this FSP, the Designated Decision Maker is the District Manager of the Kalum Forest District, BC Ministry of Forests

FSP Overview Map, showing Forest Development Units (and sub-units)



1.2 Term of the Forest Stewardship Plan

The term of this plan is for five years, starting from the date of approval.

1.3 Interpretation

All references to the Forest and Range Practices Act, or to FRPA, mean the *Forest and Range Practices Act (SBC 2002, s.69, consolidated to March 31, 2005)*.

All references to the Forest Planning and Practices Regulation, or to FPPR, mean the Forest *Planning and Practices Regulation (BC Reg 14/2004, consolidated to March 18, 2005)*.

All references to the Government Actions Regulation, or to GAR, mean the *Government Actions Regulation (BC Reg 582/2004, effective Dec 13, 2004)*.

As a result of a government re-organisation in July 2005, the Ministry of Water, Land, and Air Protection (MWLAP) was renamed as the Ministry of Environment (MOE). References to MWLAP in this document generally are kept when they refer to actions or items pre-July 2005, and MOE is used for post July 2005 items. However, they both mean the same ministry, and any errors in references are unintentional.

All references to the Kalum Land and Resource Management Plan, or Kalum LRMP, mean the *Kalum Land and Resource Management Plan (May 2002)*.

Unless otherwise noted, statements and information provided are current to October 2005. Every effort has been made to ensure that current data have been used in map generation and analyses: i.e. current to July 2005. While this does not mean that the data is up-to-date or completely accurate, it is the best available information.

1.4 Content Requirements

The required content in a FSP is described in the *Forest and Range Practices Act* (FRPA) and the *Forest Planning and Practices Regulation* (FPPR).

The basic requirements are:

- A map that shows the boundary of proposed and approved Forest Development Units (FDUs). *FRPA section 5(1)(a)*

  There are five FDUs:

  Nass - Includes the following sub-units: Harper-Bonney; Meziadin-Kwinageese; and Taylor-Kotsinta

  Terrace -Includes the following sub-units: Big Cedar; Chimdemash; Dasque; Deep-Eneek; Fiddler; Limonite-Kitnayakwa; Kiteen; Kitsumkalum; Thunderbird-Williams;

  Kitimat Valley

  Douglas-Gardner

  Kowesas

  The sub-units of the FDUs as described above and as shown on the overview map and on the FSP maps are referenced within the FSP to assist in defining where certain strategies or results apply. The sub-units do not have any legal standing under this FSP or under the FRPA.

  Details of the lands within these FDUs are shown in the formal FSP maps, as described in **Section 4**.

- A description of the strategies and/ or results necessary to be consistent with applicable legislation, and with Objectives that have been set by government. *FRPA s. 5(1)(b)*. The strategies and results are described in **Section 2**.

- A description or a map showing the following where it exists on the FSP area. *FPPR s. 14(2) & (3)*
  - Ungulate Winter Range
  - Wildlife Habitat Areas
  - Fisheries Sensitive Watersheds
  - Lakeshore Management Zones
  - Scenic Areas
  - L1 Lakes
  - Community Watersheds
  - Old Growth Management Areas
  - Areas where harvest is prohibited
  - Timber Sale Licences and Road Permits held by the licensee

  This information is provided on the FSP maps as described in **Section 4**
- Description of the Stocking Standards that will apply on the FDUs (*FPPR s. 16*). Described in **Section 3.2**
- Where applicable, address:
  Invasive plants (*FPPR s. 17*). **Section 3.3**
  Natural range barriers (*FPPR s. 18*) **Section 3.4**
  The cumulative effect of multiple FSPs in an area (*FPPR s. 19*) **Section 3.5**
- Information on public review and advertisement, as well as efforts to meet with First Nations, must also be provided (*FRPA s. 18* and *FPPR s. 21, s. 22*) **Section 3.6**
- Signature by an authorized representative of the licensee (FRPA s. 5(3)). **Title page**

1.5 Explanation of Objectives Strategies, and Results

Objectives are descriptions of how overall goals are to be achieved. In this case, the goals are increased flexibility in forest management, decreased administrative complexity, and maintenance of environmental protection. Objectives can vary from place to place, depending on the circumstances of the area. The FRPA defines three types of objectives:

Objectives set in regulation: These objectives are explicitly stated in the Forest Planning and Practices Regulation, and apply provincially.

Objectives enabled by regulation: The *Government Action Regulation* provides authority to the Ministers of Forests; Water, Land, and Air Protection; or Sustainable Resource Management to establish objectives for certain items described in the regulation. These objectives can apply at many different scales.

> Habitat objectives have been established for several wildlife species ("Section 7" notices). Some Wildlife Habitat Area objectives are also expected to be established in the near future. Section SD2.3 of the *Supporting Document* to this FSP provides further discussion of these items.

Land-use objectives: These are objectives specific to a certain area that have been established through a Landscape Unit Plan or some sort of higher-level plan such as a Land and Resource Management Plan. The Minister of Sustainable Resource Management sets these objectives.

> The Kalum Land and Resource Management Plan (LRMP) received Cabinet approval in April 2001, with the final document published in May 2002. However, it has not been designated as a higher-level plan, and therefore, the objectives within the LRMP are not considered land-use objectives under the FRPA. Section SD1.1 of the *Supporting Document* to this FSP provides further discussion of the Kalum LRMP.

Strategies are:

- measurable or verifiable steps or practices that will be carried out in order to achieve consistency with a particular established objective, and
- the situations or circumstances that determine where in a forest development unit the steps or practices will be applied.

Results are:

- measurable or verifiable outcomes in respect of a particular established objective, and
- the situations or circumstances that determine where in a forest development unit the outcomes will be applied.

Practice Requirements can be affected by strategies or results. Under the FPPR, default practice requirements are identified that are considered to achieve some of the objectives set by government. However, the FPPR allows a FSP to provide strategies or results that can also achieve these objectives, and by doing so, the default practice requirements will no longer apply to activities under the FSP.

More information on the objectives, strategies, and results and how they relate to the forest values can be found in the *Supporting Document* to this FSP.

1.6 Parts of this document that comprise the Forest Stewardship Plan

In accordance with the FRPA, the only parts of this document that are considered to be the Forest Stewardship Plan are:

- The title/ signature page
- The results and strategies, as described in **Section 2**,
- The additional information provided, discussed, or referenced in **Section 3**, and
- The 1:50,000 scale maps indicating the FDUs as attached as part of **Section 4**.

A separate document has been prepared which provides supporting information for this plan. This "Supporting Document" is not considered part of the Forest Stewardship Plan.

1.7 Acronyms

Acronyms used in the FSP or Supporting Document are as follows:

AIA:	Archaeological Impact Assessment
AOA:	Archaeological Overview Assessment
BA:	Basal Area
BCTS:	British Columbia Timber Sales
BEC:	Biological, Ecological, and Climatic; or Biogeoclimatic Ecosystem Classification
C&E:	Compliance and Enforcement
CDC:	Conservation Data Center
CWD:	Coarse Woody Debris
CWH:	Coastal Western Hemlock
DDM:	Delegated Decision Maker
DFO:	Department of Fisheries and Oceans
EMS:	Environmental Management System
FDP:	Forest Development Plan
FDU:	Forest Development Unit
FL:	Forest Licence
FLTC:	Forestry Licence To Cut
FPPR:	Forest Planning and Practices Regulation
FRPA:	Forest and Range Practices Act
FSP:	Forest Stewardship Plan
GAR:	Government Actions Regulation
GWM:	General Wildlife Measure
ICH:	Interior Cedar-Hemlock
ILMB:	Integrated Land Management Bureau

LRMP:	Land and Resource Management Plan
LU:	Landscape Unit
MH:	Mountain Hemlock
MoE:	Ministry (or Minister) of Environment
MoF:	Ministry (or Minister) of Forests
MSRM:	Ministry (or Minister) of Sustainable Resource Management
MWLAP:	Ministry (or Minister) of Water, Land and Air Protection
NDT:	Natural Disturbance Type
NRFL:	Non-Renewable Forest Licence
OGMA:	Old Growth Management Area
QP:	Qualified professional
RIC:	Resource Inventory Committee
RMA:	Riparian Management Area
RMZ:	Riparian Management Zone
RPBio:	Registered Professional Biologist
RPF:	Registered Professional Forester
RRZ:	Riparian Reserve Zone
SRMP:	Sustainable Resource Management Plan
SP:	Site Plan
TFL:	Tree Farm Licence
TRP:	Total Resource Plan
TSA:	Timber Supply Area
TSFA:	Terrain Stability Field Assessment
TSK:	BC Timber Sales – Skeena Office
TSL:	Timber Sale Licence
UWR:	Ungulate Winter Range
VIA:	Visual Impact Assessment
VQO:	Visual Quality Objective
VSC:	Visual Sensitivity Class
WAP:	Watershed Assessment Procedure
WHA:	Wildlife Habitat Area
WTP:	Wildlife Tree Patch

2 OBJECTIVES, STRATEGIES, AND RESULTS

This section describes the objectives set by government (OSBG), the strategies to carry out, and the results to be achieved to ensure that BCTS activities within the FDUs are consistent with applicable legislation and with the OSBG. In addition, practice requirements that are subject to exemption are also described. This information is described in a table that is generally organized to follow the order of objectives as described in the FPPR: soils, timber, wildlife, riparian areas, fisheries sensitive watersheds, community watersheds, biodiversity, visual quality, and cultural heritage resources. After each objective, a statement is provided describing which of the appropriate FPPR practice requirements are being "exempted" (i.e. will no longer apply to activities under this FSP), or "not exempted" (i.e. the practice requirements continue to apply). Strategies or results are then described that are consistent with the objective. Strategies and results that share the same reference number are related to each other. Where a reference number is **bolded**, the strategy or result was created specifically for that objective. Where a reference number is not bolded, it was created for another objective, but is noted as being consistent with the current objective as well.

Other requirements of the FRPA and strategies or results to address them (other higher-level plan objectives) are inserted in the table near similar objectives (e.g. a description of the Old Growth Notice and associated strategies or results will follow the objective for biodiversity).

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
Objective	FPPR s. 5: "The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils."		
	Practice Requirement(s) exempted:		None
	Practice Requirement(s) not exempted:		FPPR s. 35,36
TSK-KA-01	Terrace (Thunderbird/ Williams)	Result	Within the Alwyn Creek watershed portion of the Terrace FDU (as shown on the FSP map): • No new roads are constructed before an equivalent amount of existing roads are deactivated. • The equivalent clearcut area (ECA) amount five years after BCTS harvesting commences is to be the same or less than before that harvesting commenced (using the same method of ECA calculation both times). • Before blocks are submitted by BCTS for TSL issuance within Alwyn Creek, a detailed road and channel assessment is in place that describes the nature and extent of sediment sources and mobility within the watershed. *This result will not apply where BCTS and the Kalum District Manager agree that action is required to prevent or address potential losses due to fire, wind, or forest health factors.*
TSK-KA-02	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	For roads that fall under BCTS' responsibility (i.e. covered by Forest Service Road with maintenance requirements, or Timber Sale Licence): Regularly inspect, document, and prioritise for action roads that will be inactive for more than nine months. As a minimum, inactive roads will be checked annually (once per calendar year), under snow-free conditions.
TSK-KA-02	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	Documentation of road inspections will be kept on file.
TSK-KA-18	*Comment: This Strategy and Result, as described below in relation to FPPR s. 8, are also consistent with FPPR s. 5.*		
TSK-KA-21	*Comment: This Result, as described below in relation to FPPR s. 8.2, is also consistent with FPPR s. 5.*		

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
Objective	FPPR s. 6: "The objectives set by government for timber are to (a) maintain or enhance an economically valuable supply of commercial timber from British Columbia's forests, and (b) ensure that delivered wood costs, generally, after taking into account the effect on them of the relevant provisions of this regulation and of the Act, are competitive in relation to equivalent costs in relation to regulated primary forest activities in other jurisdictions, and (c) ensure that the provisions of this regulation and of the Act that pertain to primary forest activities do not unduly constrain the ability of a holder of an agreement under the *Forest Act* to exercise the holder's rights under the agreement."		
	Practice Requirement(s) exempted		Not Applicable
	Practice Requirement(s) not exempted		Not Applicable
TSK-KA-03	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	Harvested blocks are reforested to • at least the minimum stocking with the species identified in the stocking standards that apply to this FSP; and • meet the regeneration delay, free growing heights, and free growing dates as described in the stocking standards that apply to this FSP.
TSK-KA-04	Terrace (Kitsumkalum)	Strategy	Where access is required to the timber harvesting land base beyond the Upper Kitsumkalum Special Resource Management Zone (SRMZ), and where there is no other practical way to provide for this access, other than by building road in or through the SRMZ, a rationale must be prepared and provided to the appropriate agency responsible for the Kalum LRMP ahead of a Timber Sale License or Road application. This rationale must detail why the road is required in or through the Upper Kitsumkalum SRMZ, including what options were evaluated. Any response from the agency responsible for the Kalum LRMP will be provided with the TSL or Road application.
TSK-KA-05	Kowesas	Result	Until a draft resource management plan is prepared for the Kowesas watershed, harvesting will be deferred in the Kowesas watershed, as represented in this FSP by the Kowesas FDU.
Objective	FPPR s. 7(1): "The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for (a) the survival of species at risk; (b) the survival of regionally important wildlife; and (c) the winter survival of specified ungulate species." Sections 9, 10, 11, 12, and 13 of the *Government Actions Regulation* (GAR) allows • the establishment of, and general wildlife measures for, "species at risk", "regionally important species", and "specified ungulate species". • designation of, and objectives for, ungulate winter range (UWR) • designation of "species at risk" *(coastal tailed frog, grizzly bear, and marbled murrelet)*, "regionally important species" *(n/a)*, and "specified ungulate species" *(Mountain Goat and Moose)*. As of September 2005, notices providing descriptions of habitat area, distribution, and attributes have been released by the Minister of WLAP for *Coastal Tailed Frog, Grizzly bear, and Marbled Murrelet, Mountain Goat and Moose*		
	Practice Requirement(s) exempted		Not Applicable
	Practice Requirement(s) not exempted		Not Applicable
TSK-KA-06	Terrace (Fiddler)	Result	No timber harvesting in the Ascaphus Creek area identified as Special Resource Management – Ascaphus as shown on the FSP map.
TSK-KA-07	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	For harvested blocks within Grizzly Bear Watershed Units* or Moose Ungulate Winter Range**, the reduced stocking and inter-tree spacing requirements for the site associations described in Table A2 of Appendix A (as discussed in Section 3.2 of this FSP) are met when free-growing is declared. ** As shown on the FSP maps.* *** As described in the supporting information to the FPPR Section 7 Notice for Moose UWR in the Kalum TSA and TFL 1.*
TSK-KA-08	Terrace (Limonite-Kitnayakwa); Kitimat Valley	Result	No more than 30% of the forested land base, excluding hardwoods, will be between 25 and 100 years old within the BCTS portion of the Copper or the McKay-Davies Grizzly Bear watersheds, unless an analysis of the Grizzly Bear watershed indicates that having more than 30% of the area within the BCTS portion will not result in the 30% threshold being exceeded.

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-09	Terrace (Limonite-Kitnayakwa)	Result	A wildlife connectivity corridor linking the Kleanza Lake area with the Zymoetz River corridor is identified and in place within two years of approval of this FSP. Activities within the corridor are limited to providing or maintaining access to timber that would be otherwise isolated, salvage of downed or threatened trees, or fire control.
TSK-KA-10	Terrace (Thunderbird-Williams)	Result	A wildlife connectivity corridor is identified for the maintenance of wildlife movement options in the low level pass between the Williams and Thomas/Clore and is in place within two years of approval of this FSP. Activities within the corridor are limited to providing or maintaining access to timber that would be otherwise isolated, salvage of downed or threatened trees, or fire control.
TSK-KA-11	Terrace (Big Cedar, Kiteen)	Result	Within the identified area through the level pass between the Kiteen and Cedar drainages as shown on the FSP map: • 100% of the forested area located in polygon "A" is retained. • Within polygon "B", timber harvesting is limited to partial cutting systems (i.e. seed tree, shelterwood, single-tree or group selection).
TSK-KA-12	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	Helicopter harvesting within 2000 m* of Mountain Goat Ungulate Winter Range (UWR)**, or other harvesting or road construction within 500 m* of Mountain Goat UWR**, may occur outside of a June 15 to October 31 (inclusive) operating window, if: 1. A qualified professional (QP) evaluates the Mountain Goat UWR and determines that (a) all or a portion of the UWR is not suitable as UWR, or (b) the population of goats using the UWR will not be unduly disturbed or affected by operations, or (c) there are mitigative actions that can be taken to ensure that operations that will not unduly disturb ungulates within their winter range; 2. A report is prepared by a QP to indicate mitigative actions or a different timing for operations that will not unduly disturb ungulates within their winter range; and 3. BCTS implements the mitigative actions in the report. ** Horizontal line-of-sight distance* *** As shown on the FSP maps, which correlate with the maps provided with the Mountain Goat Ungulate Winter Range notices for TFL 1 and the Kalum TSA (Dec 2004)*
TSK-KA-12	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	Helicopter harvesting within 2000 m (horizontal line-of-sight distance), or other harvesting or road construction within 500 m (horizontal distance) of Mountain Goat Ungulate Winter Range (UWR)*, occurs between June 15 and October 31 (inclusive), or is consistent with a report from a qualified professional (QP) that indicates the activities outside of this date range that are acceptable. This QP report will be referenced in a Site Plan for the harvesting or road construction in question. ** As shown on the FSP maps, which correlates with the maps provided in support to the Mountain Goat Ungulate Winter Range notices for TFL 1 and the Kalum TSA (Dec 2004)*
TSK-KA-13	Nass	Result	Reports from qualified professionals (QP) evaluating Candidate* Mountain Goat Ungulate Winter Range (UWR) are forwarded to MOE. If candidate Mountain Goat UWR is confirmed, and forest activities are to occur in or within 500 m (horizontal line-of-sight) of the UWR: • Site Plan (or road file) includes reference to the QP report that reviews the value of candidate Goat UWR and specifies what actions are to be taken. • Activities are consistent with actions specified in the Site Plan. ** Candidate is defined as having the attributes of Mountain Goat UWR as defined in the UWR notice for the Kalum TSA (December 2004), and having been identified to a BCTS Planning Officer by MOE.*

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-14	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	Harvesting operations within Moose Ungulate Winter Range (UWR)* may occur during a period other than between May 1 and November 30 (inclusive), if: 1. A qualified professional (QP) evaluates the Moose UWR and determines that (a) all or a portion of the UWR is not suitable as UWR, or (b) the population of moose using the UWR will not be unduly disturbed or affected by operations, or (c) there are mitigative actions that can be taken to ensure that operations that will not unduly disturb ungulates within their winter range; 2. A report is prepared by a QP to indicate mitigative actions or a different timing for operations that will not unduly disturb ungulates within their winter range; and 3. BCTS implements the mitigative actions in the report. ** As shown on the FSP maps, which correlate with the maps provided with the Moose Ungulate Winter Range notices for TFL 1 and the Kalum TSA (Dec 2004).*
TSK-KA-14	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	Harvesting operations within Moose Ungulate Winter Range (UWR)* occur between May 1 and November 30 (inclusive), or are consistent with a report prepared by a qualified professional that indicates the activities outside of this date range that are acceptable. This report will be referenced in a Site Plan for the harvesting or road construction in question. ** As shown on the FSP maps, which correlates with the maps provided in support to the Moose Ungulate Winter Range notices for TFL 1 and the Kalum TSA (Dec 2004).*
TSK-KA-15	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	Harvest areas will be of a size and distribution that emulates the historical temporal and spatial distribution of the Natural Disturbance Types (NDTs) for the forests within the FSP area. Development within a FDU will move towards the patch size and seral stage distribution targets that are in place for NDTs, and will be calculated separately for each LU that overlaps the FDU. Within four months of approval of this FSP, or of receipt of a seral/ patch analysis for the Kalum Forest District from the Integrated Land Management Bureau (ILMB)*, whichever is later, this process will be followed: **Temporal:** Conduct Seral stage analysis by LU and natural disturbance type • Determine proportional representation of the LUs within the BCTS FDUs • Determine representation with respect to sensitive areas • Determine need for actions to address seral stage imbalances, based on the Old Growth Order (June 2004) • If necessary, prepare action plan(s) and implement **Spatial:** Analyse patch size distribution by LU and natural disturbance type • Determine proportional representation of existing patch sizes within the BCTS FDUs • Determine target patch size distribution for the BCTS FDU • Determine need for actions to address patch size imbalances, based on the Old Growth Order (June 2004) • If necessary, prepare action plan(s) and implement Prepare a summary of the allowable patch size distribution. ** As of September 2005, this work is being prepared for the ILMB on the Kalum TSA, TFL 1, and TFL 41 by Ardea Biological Consulting. Work on the Nass TSA has not commenced.*
TSK-KA-15	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas Nass	Result	The sizes of harvest openings under this FSP are within the limitations as described in an allowable patch size distribution. If there are areas that are outside of target* levels for temporal and spatial distribution: five (5) years after the approval of this FSP, harvest activities under this FSP are shown to be moving toward the target levels* for these areas. * Target levels are as determined through the Strategy **TSK-KA-15**.

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-16	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	Activities may occur within identified Mountain Goat Ungulate Winter Range (UWR)* if: (1). A qualified professional (QP) evaluates the identified Goat UWR and determines it is not suitable as UWR, (2). A report summarizing the findings from (1) above is provided to a MOE QP a reasonable period** in advance of any operations commencing within the UWR, (3). The MOE QP finds no fault with the conclusions of the evaluation by the time operations commence within the UWR. ** As shown on the FSP maps, which correlates with the maps provided in support to the Mountain Goat Ungulate Winter Range notices for TFL 1 and the Kalum TSA (Dec 2004).* *** The time frame for "a reasonable period" in (2) above will be set by mutual agreement between the MOE and BCTS. Generally, the time frame should not be less than 30 days.*
TSK-KA-17	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	Roads constructed after the approval of this FSP within 500 m of Mountain Goat UWR* will not require an access restriction within one year of the completion of harvesting activities if: 1. a rationale is provided to the District Manager detailing why the road is required for an extended time frame; and 2. the District Manager finds the rationale to be acceptable. (Acceptable reasons include: continued access to timber or other resources beyond the UWR; silviculture; forest health concerns; and public safety.) ** As shown on the FSP maps, which correlates with the maps provided in support to the Mountain Goat Ungulate Winter Range notices for TFL 1 and the Kalum TSA (Dec 2004).*
TSK-KA-17	Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	Roads constructed after the approval of this FSP that are within 500 m of Mountain Goat Ungulate Winter Range (UWR)* will have restricted access within one year of the completion of post-logging activities, unless exempted as per the Strategy **TSK-KA-17**. ** As shown on the FSP maps, which correlates with the maps provided in support to the Mountain Goat Ungulate Winter Range notices for TFL 1 and the Kalum TSA (Dec 2004).*
TSK-KA-20	*Comment: This Result, as described below in relation to FPPR s. 8, is also consistent with FPPR s. 7(1) – particularly with respect to the Section 7 notice for Coastal Tailed Frog*		
TSK-KA-23	*Comment: This Strategy, as described below in relation to FPPR s. 9, is also consistent with FPPR s. 7(1) – particularly with respect to the Section 7 notices for Grizzly Bear and Marbled Murrelet*		
Objective:	FPPR s. 8: "The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas..."		
	Practice Requirement(s) exempted:	None	
	Practice Requirement(s) not exempted:	FPPR s. 47, 48, 49, 50, 51, 52(2), 53	
TSK-KA-18	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	Operations may be conducted outside the operating windows identified for Area 5 in Table 1 in the *A User's Guide to Working in and Around Water* document (January 2001), if: Additional measures as necessary to ensure water quality above licensed water intakes and fish habitat is protected will be described in a rationale for the variance, including a description of mitigating actions. The rationale will be maintained as part of (or with) the Site Plan or Road Permit file. The file will also include follow up documentation that confirms that works occurred in compliance with the mitigative actions prescribed.
TSK-KA-18	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	Operational activities occur within the windows described for Area 5 in Table 1 in the *A User's Guide to Working in and Around Water* document (January 2001) or in accordance with the process described in Strategy **TSK-KA-18**.

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-19	Terrace (Limonite-Kitnayakwa)	Result	On roads that are under BCTS control (i.e. under TSL, or FSR with maintenance obligations): • Other than at required bridge crossings, no direct road links to the banks of the Zymoetz (Copper) River from roads built after 2005. • During snow-free periods, the Zymoetz (Copper) and Kleanza Mainlines will be drivable by two-wheel drive vehicles. • No more than one active bridge crossing of the Class I portion of the Zymoetz (Copper) River* at any given time. ** Within the Kalum Forest District, and as identified in the Freshwater Fishing Regulations Synopsis 2004-2005 (Region 6)*
TSK-KA-20	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	After approval of this FSP, or after April 1, 2006 (whichever comes first): for only those blocks where layout activities have not yet started, retain an amount of basal area within the riparian management zone (RMZ) of a stream, wetland, or lake as follows: On S1, S2, and S3 streams*, retain a minimum of 20% of the basal area of the RMZ. On S4 and S5 streams*, retain a minimum of 10% of the basal area of the RMZ. On S6 streams*, no basal area retention is necessary. On all Wetlands* and Lakes*, a minimum of 10 % of the basal area of the riparian management zone will be retained. Basal area retention in riparian management zones may be distributed in a non-uniform manner along the stream: that is, clumps of retention may be interspersed with portions of RMZ that have no retention. The use of area retention will be considered a reasonable estimate of basal area retention as long as the forest type of the retained portion of the riparian management zone is similar to that of the original portion. ** Stream Wetland and Lake is as defined in FRPA*
TSK-KA-01	*Comment: This Result, as described above in relation to FPPR s. 5, is also consistent with FPPR s. 8*		
TSK-KA-22	*Comment: This Result, as described below in relation to FPPR s. 9, is also consistent with FPPR s. 8*		
Objective:	FPPR s. 8.1: "(2) Until December 31, 2005 the objective set by government for fish habitat in fisheries sensitive watersheds is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities in the fisheries sensitive watershed from resulting in a material adverse impact on the habitat of the fish species for which the fisheries sensitive watershed was established. (3) The objective set by government under subsection (2) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests."		
	Practice Requirement(s) exempted:	None	
	Practice Requirement(s) not exempted:	FPPR s. 55, 56, 57	
Not applicable	*Comment: There are no fisheries sensitive watersheds designated within the FDUs under this FSP.*		
Objective:	FPPR s. 8.2: "(2) The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed from resulting in (a) a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks, or (b) the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under (i) an enactment, or (ii) the licence pertaining to the waterworks. (3) The objective set by government under subsection (2) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests."		
	Practice Requirement(s) exempted:	None	
	Practice Requirement(s) not exempted:	FPPR s. 59, 60, 61	

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-21	Terrace	Result	Within Community Watersheds: before harvesting commences under authority of this FSP: 1. Clear-cut equivalency is calculated* for the Community Watershed as a whole, and for individual sub-basins larger than 250 ha; or 2. An assessment* is conducted, and if a. the threshold for clear-cut equivalency that is determined as appropriate as a measure of maintenance of natural flow regimes is more than 20%, then that threshold is used in 4. below b. a threshold for a parameter different from clear-cut equivalency is determined to be more appropriate as a measure of maintenance of natural flow regimes, then that parameter and threshold is used in 4. below then 3. Subject to 4 below, clear-cut equivalency for sub-basins larger than 250 ha is less than 20%; and clear-cut equivalency for sub-basins smaller than 250 ha exceeds 20% only if the overall clear-cut equivalency for the community watershed basin is less than 20%; 4. If there is a parameter and/or threshold that qualifies as described in 2(a) or 2(b) above, then that parameter and/or threshold will be used for the Community Watershed instead, and the sub-basin size identified in 3. above will not necessarily apply. * Consistent with the *Watershed Assessment Guidebook (2nd Ed, version 2.1 April 1999)*
TSK-KA-18	*Comment:* *This Strategy and Result, as described above in relation to FPPR s. 8, are also consistent with FPPR s. 8.2*		
Objective:	FPPR s. 9: "The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape."		
	Practice Requirement(s) exempted:		None
	Practice Requirement(s) not exempted:		FPPR s. 64, 65
TSK-KA-22	Terrace (Thunderbird-Williams)	Result	Within the area identified as Special Resource Management - Lakelse subzone 2 as shown on the FSP map: • Early seral stage (i.e. less than 40 years) is less than 27%. • The maximum opening size will be less than 15 hectares (net), and retention (WTP and other reserves) shall be at least 15% of gross block area. • At the end of the term of this FSP, at least 50% of the timber volume harvested under this FSP shall be by selection silviculture systems (i.e. seed tree; shelterwood; single-tree or group selection).

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-23	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	For the purposes of this strategy, "data" is (a) the spatial designation of Old Growth Management Areas (OGMAs) in the Kalum Forest District from the Integrated Land Management Bureau (ILMB); or (b) a seral/ patch analysis for the Kalum Forest District* from the ILMB. Within four months of the latter of approval of this FSP, or of receipt of data (as described above): Determine the amount of old growth that exists within the portion of a Landscape unit (LU) that falls within the FDU. If the amount of old growth is at least 95% of the minimum targets for the Biogeoclimatic Ecological Classification (BEC) variant and Natural Disturbance Type (NDT) described in the Old Growth Order (*June 30, 2004*), no further action is required. If the amount is below 95% of the minimum targets, review the representation of old growth (by BEC and NDT) within the LU but outside of the FDU: if there is adequate old growth (by BEC and NDT) to meet the LU targets, no further action is required. If there is insufficient old growth, spatially designate old growth management areas and old growth recruitment areas within the BEC zone. For BEC variants that amount to less than 100 ha in a LU, the targets will not apply. For BEC variants that are represented adequately within the LU, but outside of the FDU (through no-log areas or OGMA designation), the targets will not apply within the FDU. Activities within spatially-defined OGMAs may occur to the 95% limit identified above, for the following reasons: (i) to manage natural processes that threaten resources outside of the OGMA; (ii) to access timber or other resources outside of the OGMA; or (iii) where part or all of an OGMA is necessary for efficient forest operations and alternate old growth or near-old growth areas are designated within the LU to achieve the targets. Any alteration of spatially defined OGMAs will be forwarded to the Agency responsible for the Old-Growth Order, and in the case of OGMAs altered as per (iii) above, alternate old growth or near-old growth areas to achieve the targets within the LU will be provided. ** As of September 2005, this work is being prepared for the Kalum TSA, TFL 1, and TFL 41 by Ardea Biological Consulting. Work on the Nass TSA has not commenced*
TSK-KA-03	*Comment: This Result, as described above in relation to FPPR s. 6, is also consistent with FPPR s. 9*		
TSK-KA-05	*Comment: This Result, as described above in relation to FPPR s. 6, is also consistent with FPPR s. 9*		
TSK-KA-09	*Comment: This Result, as described above in relation to FPPR s. 7(1), is also consistent with FPPR s. 9*		
TSK-KA-10	*Comment: This Strategy and Result, as described above in relation to FPPR s. 7(1), are also consistent with FPPR s. 9*		
TSK-KA-11	*Comment: This Result, as described above in relation to FPPR s. 7(1), is also consistent with FPPR s. 9*		
Objective:	FPPR s. 9.1: "The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees."		
	Practice Requirement(s) exempted:		Within the Terrace, Kitimat Valley, and Douglas-Gardner FDUs): FPPR s. 66, 67
	Practice Requirement(s) not exempted:		Within the Kowesas and Nass FDUs: FPPR s. 66, 67
TSK-KA-24	Terrace; Kitimat Valley; Douglas-Gardner	Result	After approval of this FSP, or after April 1, 2006 (whichever comes first): on blocks where layout activities have not yet started, wildlife tree retention for a harvest unit* is consistent with Table 6 of the *Draft Kalum Sustainable Resource Management Plan* (September 2005). Wildlife retention on blocks that have been started before approval of this FSP, or before April 1, 2006 (whichever comes first) will conform to the approved FDP in effect immediately prior to approval of the FSP. ** Harvest unit: as defined in the Draft Kalum SRMP*
TSK-KA-20	*Comment: This Result, as described above in relation to FPPR s. 8, is also consistent with FPPR s. 9.1*		

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-22	*Comment: This Result, as described above in relation to FPPR s. 9, is also consistent with FPPR s. 9.1*		
TSK-KA-23	*Comment: This Strategy, as described above in relation to FPPR s. 9, is also consistent with FPPR s. 9.1*		
TSK-KA-31	*Comment: This Strategy, as described below in relation to FPPR s. 9.2, is also consistent with FPPR s. 10*		
Objective:	**OLD GROWTH ORDER (Higher Level Plan Objectives):** The Minister of Sustainable Resource Management made an *Order Establishing Provincial Non-spatial Old Growth Objectives*, effective June 30, 2004. This Order establishes landscape units (LU) and biodiversity emphasis for each LU, and retention levels for old growth by natural disturbance type. This "Old Growth Order" requires an analysis of each LU with respect to the amount of old-growth remaining by biogeoclimatic ecological classification.		
	Practice Requirement(s) exempted:		Not applicable
	Practice Requirement(s) not exempted:		Not applicable
TSK-KA-23	*Comment: This Strategy, as described above in relation to FPPR s. 9, is also consistent with the Old Growth Order*		
Objective:	FPPR s. 9.2(2): "The objective set by government in relation to visual quality for a scenic area, that (a) was established on or before October 24, 2002, and (b) for which there is no visual quality objective is to ensure that the altered forest landscape for the scenic area (c) in visual sensitivity class 1 is in either the preservation or retention category, (d) in visual sensitivity class 2 is in either the retention or partial retention category, (e) in visual sensitivity class 3 is in either the partial retention or modification category, (f) in visual sensitivity class 4 is in either the partial retention or modification category, and (g) in visual sensitivity class 5 is in either the modification or maximum modification category."		
	Practice Requirement(s) exempted:		Not applicable
	Practice Requirement(s) not exempted:		Not applicable
TSK-KA-25	Terrace	Result	On the Class I and Class II waters* of the • Zymoetz (Copper) River; • Gitnadoix River; • Kalum River; and • Lakelse River; a 100 m reserve is established along the river, or less if "Preservation" visual quality can be achieved for the first 100m from the banks of the river, as described/ determined in a Site Plan for the area where the reserve is less than 100 m. (All distances are measured in slope distance) ** As identified in the Freshwater Fishing Regulations Synopsis 2004-2005 (Region 6)*

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-26	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	A visual impact assessment (VIA) will be carried out and attached or referred to in the Site Plan for blocks that are located within known scenic areas and that are identified with a Visual Quality Objective (VQO) of Preservation (P), Retention (R), Partial Retention (PR), or Modification (M), or a Visual Sensitivity Class (VSC) of 1, 2, 3,or 4. Visual Sensitivity Class will be treated as having VQOs as follows: VSC 1 = Retention VSC 2 = Partial Retention VSC 3 and 4 = Modification VSC 5 = Maximum Modification The visual impact assessment will • review the visual landscape from selected viewpoints (see below for viewpoint selection and criteria) • describe how the visual design is consistent with the VQO. The block configuration in the signed Site Plan will reflect the visual design as described in the visual assessment. Viewpoints are identified as follows: 1. As shown on the FSP maps (as amended from time to time), or if no viewpoints area identified on the FSP maps, through mutual agreement between representatives of BCTS and the MoF* 2. No more than three viewpoints are to be selected for a visual impact assessment unless mutually agreed between representatives of BCTS and the MoF* 3. If a chosen viewpoint does not meet the viewpoint criteria**, an alternate viewpoint can be established by mutual agreement between representatives of BCTS and the MoF* * MoF representative = District Manager, Stewardship Forester, or other mutually agreed District Manager designate ** Viewpoint criteria: for a visual landscape, a viewpoint must be: • At a point along a travel corridor that allows for an extended viewing experience***, or • At a place that persons can stop for an extended viewing experience*** *** extended viewing experience = greater than 30 seconds uninterrupted view (at the posted/ normal speed limit)
TSK-KA-26	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	A visual impact assessment (VIA) as described in Strategy **TSK-KA-26** is in place for a block within that part of a known Scenic Area that has a VQO of P, R, PR, or M, or, if no VQOs in place, an established Visual Sensitivity Class of 1, 2, 3, or 4. A rationale statement is provided in the Site Plan indicating how the Visual Impact Assessment Guidebook (2nd Ed., January 2001) has been followed.
TSK-KA-27	Douglas-Gardner	Result	Harvesting of the area visible from the Sue Channel/Hawkesbury Island protected area* is with a single tree or group selection silviculture system with a maximum opening size of 2 tree lengths. * *As shown on the FSP map*
Objective	FPPR s. 10: "The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are (a) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and (b) not regulated under the Heritage Conservation Act."		
	Practice Requirement(s) exempted		Not applicable
	Practice Requirement(s) not exempted		Not applicable

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-28	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	BCTS will meet regularly with local First Nation groups that have asserted claim area within the BCTS FDUs. As a minimum, meetings must occur annually. • Request from both the Ministry of Forests and the First Nations the opportunity to review traditional use studies where they are available, ideally in conjunction with first nation representatives. • Where traditional use information is made available, BCTS will hold any information received in confidence. It is only with the express written consent or direction of the holder of the Traditional Use information that BCTS will release any traditional use information to any other party (including other First Nation groups, the Government of BC, or the BC Ministry of Forests). • BCTS will review with respective First Nations current information pertaining to proposed operations, with the intent of describing and addressing the concerns of both parties". Specifically: - Determine areas of concern that may result from forest management activities when compared with First Nation interests or activities, or that may occur between First Nations groups as a result of different forest management approaches. - Attempt to resolve any conflicts through consensus. BCTS will prepare a short summary indicating whether there were any issues and how they were resolved. - If conflicts cannot be resolved, BC Timber Sales will prepare a summary of the concerns and how BCTS has attempted to address the concerns. Summaries* of this process will be provided to the District Manager, and copied to the First Nation representative. In the unlikely event that meetings have not occurred, documentation of the efforts made to meet and/or review information with First Nations will be provided to the District Manager by BC Timber Sales. This will allow the District Manager to assess if efforts were reasonable and consistent with the intent of this Strategy. ** summaries will respect confidentiality*
TSK-KA-28	Terrace (Kiteen); Nass	Result	No new Timber Sale Licences will be issued by BC Timber Sales under this Forest Stewardship Plan* within the Gitanyow Traditional Territory portion of the Terrace and Nass FDUs until: • completion of a joint planning process that includes Gitanyow, BCTS, and the BC Ministry of Forests (Operations Division), or • March 31, 2006 Whichever comes first. Note: until this FSP is approved, TSLs may still be issued under BCTS' Forest Development Plan (FDP), as Category A blocks under the FDP were approved through a separate process. *(This note does not form part of this result or of this FSP)*
TSK-KA-29	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Strategy	Personnel involved in operational development will require training in identification of cultural features, and will be instructed to notify BC Timber Sales if anything is found. For specific sites identified by operational personnel (e.g. layout, road construction, or harvesting crews, and not previously identified through Traditional Use Studies or through official First Nations' representatives: • A BCTS representative will be notified; • A site visit will be conducted to determine the need for mitigative measures or for an Archaeological Impact Assessment (AIA) to be done before harvesting commences. In the absence of any site-specific information, or where operational development personnel have not been trained in cultural features, BCTS will make use of the Archaeological Overview Assessments for the Kalum TSA, TFL 41, and TFL 1: • Any blocks within a "High" archaeological potential polygon will have an AIA done before harvesting commences. No pre-contact features identified through an AIA will be disturbed without an Alteration Permit having been issued. Information on previously unidentified cultural heritage resource features and a description of any mitigative measures will be provided to the BC Timber Sales Manager at or before Timber Sale Licence submission. In the case where a cultural heritage resource feature is discovered after a cutting authority is issued, this information will be provided to the Timber Sales Manager within two weeks of a BCTS representative being notified of the features' discovery.

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-30	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	• AIAs completed when necessary. • Information on any previously unidentified cultural heritage features found in a planned Timber Sale Licence (TSL), including a description of any mitigative measures taken, is provided to the Timber Sales Manager prior to issuance of the TSL. • Site Plans indicate whether cultural resource heritage features were found, and if found, any mitigative measures that were taken.
TSK-KA-31	Nass; Terrace; Kitimat Valley; Douglas-Gardner; Kowesas	Result	For any block with Cedar or Cypress, removal of Cedar or Cypress from retention areas (including WTPs or Riparian Management Zones* (RMZs) for cultural purposes occurs as follows: • No more than 5% of the co-dominant/ dominant stems within a WTP or RMZ** area are removed, with no more than 10% of the stems within a given hectare, unless the Site Plan describes how the WTP or RMZ is able to retain its function; and • When from within an area within an active cutting authority that is held by BCTS or one of its licensees, removal is authorized through a letter of agreement between a First Nation Council and BCTS, with a copy to the District Manager of the Kalum Forest District; or • When from within an area where BCTS does not have an active cutting authority, removal is authorized through a letter of agreement between a First Nation Council and the MoF, with a copy to the Skeena Business Area Manager of BCTS, and a Free Use Permit is issued to a person designated by the First Nation Council. ** Removal of stems from within Riparian Reserve Zones will be as per the Forest Planning and Practices Regulation – currently, removal for cultural purposes is not an allowed activity within RRZs.*
Objective	FPPR 12(3): Despite section 12.1 (2), a person who prepares a forest stewardship plan must specify in it, for the objective set out in section 8, a result or strategy that addresses retention of trees in a riparian management zone.		
	Practice Requirement(s) exempted:	Not applicable	
	Practice Requirement(s) not exempted:	Not applicable	
TSK-KA-20	*Comment: This Result, as described above in relation to FPPR s. 8, is also consistent with FPPR s. 12(3)*		
Objective	**RECREATION TRAILS & SITES (Higher Level Plan Objectives):** As of September 2005, the following are Recreation Sites/ Trails that have established Higher Level Plan Objectives and are within BCTS FDUs:		

	Site/ Trail	Recreation Experience Objective	Site/ Trail Management Objective	Access objectives
	Big Cedar Recreation Trail	Appropriate semi-primitive motorized winter recreational activities	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	Winter motorized access from November 1 to June 30; all motorized activities restricted from July 1 to October 31
	Bonney Lake Recreation Site	Roaded	Lake shoreline and natural vegetation will be retained within site boundaries	n/a
	Bonney Lake Portage Recreational Trails	Semi-primitive non-motorized	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	n/a
	Clearwater Lakes Recreation Site	Semi-primitive non-motorized	Campsite and trail will be retained. Lake shoreline and natural vegetation will be conserved.	Non-motorized
	Deception Lake Recreation Site *DECOMMISSIONED*	Roaded	Lake shoreline and natural vegetation will be retained within site boundaries	n/a

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description		
	Glory Hole Recreation Site *DECOMMISSIONED*		Roaded	Natural vegetation will be retained within site boundaries	n/a
	Hai Lake Recreation Trail		Semi-primitive non-motorized	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	n/a
	Jigsaw Lake Recreation Site		Roaded	Shoreline, and natural vegetation will be retained within site boundaries	n/a
	Maroon Mountain Recreation Trail		Semi-primitive non-motorized	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	n/a
	Mt. Elizabeth Recreation Trail		Semi-primitive non-motorized	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	n/a
	Onion Lake Recreation Trail		Semi-primitive non-motorized	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	n/a
	Onion Lake Recreation Ski Trails		*Winter, with snow on the ground*: Semi-primitive non-motorized *Summer, snow free season*: Roaded	Trail will be maintained and the natural vegetation will be conserved within ten metres either side of the trail centerline	*Winter, with snow on the ground*: No motorized use permitted, other than for track setting and trail grooming activities *Summer, snow free season*: n/a
	Pine Lake Recreation Site		Roaded	Shoreline, and natural vegetation will be retained within site boundaries	n/a
	Pine Lake Recreation Trail		Semi-primitive non-motorized	Active trail, lake shoreline and natural vegetation will be retained within ten metres either side of the trail centerline	n/a
	Red Sand Lake Interpretive Forest Site		Roaded	Shoreline and natural vegetation will be conserved within the site boundaries Small scale timber harvesting and silviculture practices will exist on the site as part of forest interpretation and education Forest interpretation activities and education on local ecosystems and forest practices will be provided through brochures, self guided interpretive trails and signage	
	Robinson Ridge Recreation Trail		Appropriate semi-primitive motorized winter recreational activities	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	Winter motorized access from November 1 to June 30; all motorized activities restricted from July 1 to October 31
	Sleeping Beauty Recreation Trail *NOW A PARK*		Semi-primitive non-motorized	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	n/a

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description		
	Sterling Mountain Recreation Trail		Appropriate semi-primitive motorized winter recreational activities	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	Winter motorized access from November 1 to June 30; all motorized activities restricted from July 1 to October 31
	Thornhill Mountain Recreation Trail		Semi-primitive non-motorized	Active trail and natural vegetation will be retained within ten metres either side of the trail centerline	n/a
	Weewanie Hotsprings Recreation Site *NOW A PARK*		Semi-primitive motorized	Marine foreshore and natural vegetation will be retained within site boundaries. The thermal springs will be protected within site boundaries	Boat access to the site is available year round, weather permitting.
	West Lake Recreation Site		Roaded	River and creek shoreline and natural vegetation will be retained within site boundaries	n/a
	Practice Requirement(s) exempted:		Not applicable		
	Practice Requirement(s) not exempted:		Not applicable		
TSK-KA-32	Nass; Terrace; Kitimat Valley	Result	On these established Recreation Trails or Sites with established objectives: • Big Cedar Recreation Trail • Bonney Lake Portage Recreational Trails • Clearwater Lakes Recreation Site • Hai Lake Recreation Trail • Maroon Mountain Recreation Trail • Mt. Elizabeth Recreation Trail • Onion Lake Recreation Trail • Onion Lake Recreation Ski Trails • Pine Lake Recreation Trail • Robinson Ridge Recreation Trail • Sterling Mountain Recreation Trail • Thornhill Mountain Recreation Trail No disturbance by harvesting, road construction, or silviculture activities to natural vegetation within 10 m of trail centerline other than for a required crossing. Timber Sale Licence, Road Permit, or Forest Service Road submission indicates that a trail crossing is required to access productive forest land that would otherwise be isolated. The trail location is re-established if the crossing disturbs it. Alternatively, the trail can be relocated away from the crossing. The timing of the trail re-establishment or trail relocation will require consultation with the District Manager. A trail crossing is deactivated once it is no longer required.		
TSK-KA-33	Nass; Terrace; Kitimat Valley; Douglas-Gardner	Result	On these established Recreation Sites with established objectives: • Bonney Lake Recreation Site • Clearwater Lakes Recreation Site • Deception Lake Recreation Site • Glory Hole Recreation Site • Jigsaw Lake Recreation Site • Pine Lake Recreation Site • Red Sand Lake Interpretive Forest Site • West Lake Recreation Site No disturbance to areas within 10 m of lake shorelines, river-, stream-, or creek-banks, or marine foreshore. (This only applies to sites where an RRZ is not in existence). The remainder of the area within the recreation sites will be reserved from disturbance other than where BCTS and the Kalum District Manager agree the disturbance will be for the improvement of the recreation experience, or where action or access is required to prevent or address potential losses due to fire, wind, or forest health factors.		

FSP Ref #	Applicable FDU(s)	Strategy or Result?	Description
TSK-KA-34	Terrace (Kitsumkalum)	Strategy	On the Red Sand Lake Interpretive Forest Site: Small scale timber harvesting and silviculture practices are acceptable on the site as part of forest interpretation and education. Any forestry activity within this Recreation Site will be planned to meet the objective of forest interpretation and education: a description of the activity, how it meets the objective, and its proposed outcomes will be provided with the first permit associated with the activity, whether it be a Road Permit, Road Use Permit, or a Timber Sale Licence application.
TSK-KA-35	Terrace (Big Cedar); Kitimat Valley	Result	This result applies to these established Recreation Trails with established objectives: • Big Cedar Recreation Trail • Onion Lake Recreation Ski Trails • Robinson Ridge Recreation Trail • Sterling Mountain Recreation Trail No motorized activity from July 1 to October 31, except as follows: Motorised activity for silviculture or planning activities (or for access to silviculture or planning activities) is acceptable if written or email notice is provided to the District Manager, and the DM does not indicate a concern.
TSK-KA-36	Nass; Terrace; Kitimat Valley; Douglas-Gardner	Result	On all established recreation sites or trails with established objectives (excepting Deception Lake, which has had access cut-off): At least four-wheel drive status is maintained for roads under the control of BCTS that are the only access to the trail or site.

3 ADDITIONAL FSP INFORMATION

In addition to the objectives, strategies, and results, there are several other items to be shown or addressed in the FSP.

3.1 Areas under Cutting Authority (TSL, CP, FSR, RP)

The FSP maps show blocks that are currently under Timber Sales Licence (TSL) and Forest Service Roads (FSR) that are under the control of BC Timber Sales.

In addition, cutblocks or roads that are currently under Cutting Permit (CP) or Road Permit (RP), and are held by others, are shown on the FSP maps.

3.2 Stocking Standards

The FSP must describe the Stocking Standards that will apply on the FDUs (FPPR s. 16). The following information is provided to describe the stocking standards that apply on the FDUs in this Forest Stewardship Plan.

Tables describing the stocking standards that apply on the FDU in this FSP are provided in Appendix A. The stocking standards in Appendix A include:

- Table A1: species, regeneration dates, stocking required at regeneration, free-growing heights, and required stocking at free-growing for the site series that occur within the FSP area;
- Table A2: standards for plant associations identified for grizzly bear habitat and moose ungulate winter range; and
- Table A3: standards for multi-layer management, including activities under FPPR section 44(4).

3.2.1 Application of stocking standards

Subject to the following sections (3.2.2 through 3.2.6), the stocking standards may be applied across one cutblock (as per FPPR section 44) or across several cutblocks (FPPR section 45) as long as the area within the cutblock(s) has been mapped to identify the biogeoclimatic ecological classification (zone, subzone, and where applicable, variant) as described for each stocking standard, and only if the appropriate stocking standard identified in Appendix A for the biogeoclimatic ecological classification (zone, subzone, and where applicable, variant) is used.

3.2.2 Minimum Inter-tree Distance

Trees must be in good health, of good form and vigour. Unless otherwise stated within Appendix A, the following minimum inter-tree distances will apply for trees to be counted as well-spaced.

- 1.6 metres when planting on hygric, sub-hydric or mechanically site prepared areas.
- 2.0 metres for all other areas (except those areas where site factors or objectives require a different minimum inter-tree distance).

3.2.3 Height of Trees Above Brush

In addition to the required minimum height, well-spaced trees must meet the following minimum percentage height above brush in order to be free growing:

% Height above brush:	100%	125%	150%
Applies to:	ICH	ESSF, MH	CWH

3.2.4 Complexes

Where a complex has been noted in a Silviculture Prescription or Site Plan by the inclusion of 2 or more stocking standards or their I.D. numbers, the silviculture surveyor will make a determination as to which site series the plot falls and will utilize the appropriate stocking standard. For reporting purposes, the most dominant site series stocking standard will be used.

3.2.5 Hardwoods

Hardwood (deciduous) species are noted in the Stocking Standards, and will be used as follows:

- Cottonwood (Act) and Alder (Dr) are commercial species and can contribute to minimum stocking in both mixed-wood and hardwood stands.
- In mixed-wood stands (i.e. comprised of both hardwoods and softwoods), where a Site Plan has identified that mixed-wood management is acceptable or desirable, hardwoods (other than cottonwood or alder as noted above) identified in the Stocking Standards may be used in calculating stocking above the minimum levels.
- For hardwood species other than cottonwood or alder, any desire to establish a hardwood management regime on an area (i.e. management where hardwoods make up more than 90% of the target stocking) will require consultation with the District Manager.

3.2.6 Amendments

In accordance with FRPA section 197(5), BCTS specifies that it may choose to amend the stocking standards for silviculture prescriptions or site plans that are already in existence to conform to this FSP.

As per the FPPR section 16, public notice of an amendment to the stocking standards is not required.

3.3 Invasive Plants

The FSP must address the introduction or spread of invasive plants (FPPR s. 17), and the following are measures to be used for control of invasive plant species identified in the *Invasive Plants Regulation*:

1. *Use certified seed only in erosion control and grass-seeding activities*
2. *In the course of their duties, BCTS field team personnel will make note of occurrences of invasive plants, and will report these occurrences to the Terrace Planning Forester within ten (10) working days of noting the occurrence. The Terrace Planning Forester will then collate and pass this information to a representative of the North West Invasive Plant Council within ten (10) working days of receiving a report from a BCTS field team member.*

3.4 Natural Range Barriers

Where applicable (FRPA s. 48), the FSP must specify measures to mitigate the effect of removing or rendering ineffective natural range barriers (FPPR s. 18). None of the activities under this FSP are expected to remove or render ineffective a natural range barrier, and therefore, there are no measures specified.

3.5 Cumulative Effect of Multiple FSPs

Where applicable, the FSP must address the cumulative effect of multiple FSPs in an area (FPPR s. 19).

There are two other approved FSPs that have overlap with the BCTS FSP. The FSP for FLA16884, held by Timber Baron Forest Products Ltd. overlaps with the northern portion of BCTS' Nass FDU (Meziadin-

Kwinageese, Harper-Bonney sub-units). The approved FSP for Kalum Ventures Ltd. (Non-Renewable Forest Licence A73726 and Forestry Licence To Cut A77424) overlaps with BCTS' Terrace FDU (Kitsumkalum, Big Cedar, and Deep-Eneek sub-units).

There is also another FSP that has been submitted for approval: Kitselas Forest Products Ltd. (Non-Renewable Forest Licence A73377 and Forestry Licence To Cut A77426) overlaps with BCTS' Terrace FDU (Fiddler, Limonite-Kitnayakwa, Thunderbird-Williams, and Dasque sub-units) and Kitimat Valley FDU.

The strategies and results from all of these FSPs have been compared, and activities under the FSPs are not inconsistent with each other. The FSPs also share similar approaches to landscape level issues, including proportionality for old growth and seral stage analyses, so are consistent with each other in this respect as well.

Forest Development Plans

There are currently four approved Forest Development Plans (FDPs) on areas within the BCTS FDUs: Coast Tsimshian Resources Ltd. – TFL 1 and FL A16835 (former New Skeena Forest Products Inc. tenures); Skeena Sawmills - TFL 41; and Bell Pole Company FL A16836. Where the information has been readily available, approved blocks from these tenure holders are shown on the FSP maps.

3.6 Referral and Public Review Summary

Details regarding referral of this Forest Stewardship Plan to agencies and First Nations, the public review process of the FSP, and any subsequent revisions to the FSP, are described in detail in the supporting document to this FSP.

4 MAPS

The Forest Stewardship Plan maps are provided separately from the Forest Stewardship Plan text.

The FSP maps are provided at a scale of 1:50,000. The maps show the critical content requirements as described in section 5(1)(a) of the *Forest and Range Practices Act,* and section 14 of the *Forest Planning and Practices Regulation.*

There are five Forest Development Units in the FSP. They are shown on the maps and are identified as:

Nass
Includes the following sub-units: Harper-Bonney; Meziadin-Kwinageese; and Taylor-Kotsinta.

Terrace
Includes the following sub-units: Big Cedar; Chimdemash; Dasque; Deep-Eneek; Fiddler; Limonite-Kitnayakwa; Kiteen; Kitsumkalum; and Thunderbird-Williams.

Kitimat Valley

Douglas-Gardner

Kowesas

The sub-units of the FDUs as described above are shown on the maps and are referenced within the FSP to assist in defining where certain strategies or results apply. The sub-units do not have any legal standing under this FSP or under the FRPA.

The FDUs were chosen primarily to match internal administrative boundaries; other factors that influenced the shape and number of FDUs include watershed boundaries, trapline boundaries, and First Nation asserted traditional territories.

5 SUPPORTING DOCUMENTATION

Information that supports or was used in the development of this FSP is contained in a separate document:

- information directly related to the strategies and results,
- general descriptions and discussion of issues that should add clarity and context to the enforceable strategies and results noted in this Forest Stewardship Plan with respect to the eleven forest values that have been identified in the Forest and Range Practices Act;
- a description of the sources of information used in preparing this Forest Stewardship Plan;
- Public, Agency, and First Nation referral, comment, review, and response information

APPENDIX A STOCKING STANDARDS TABLES

In the following tables: "Biogeoclimatic unit" or "BEC classification" means the zone, subzone, variant and site series described in the most recent field guide published by the Ministry of Forests for the identification and interpretation of ecosystems, as applicable to a harvested area. "MIN" or "Min" means minimum, "Max" means maximum

Table A1: Regeneration and Free Growing Guide

			Regeneration Guide							***Free Growing Guide***			
	BEC Classification		**Species**			**Stocking** (well-spaced/ha)			**Regen Delay**	**Assessment**		**Min. Height****	
I.D. #	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	**Earliest** (yrs)	**Latest** (yrs)	**Species**	**Ht** (m)
19,001	**BWBSdk1**	01	Pl Sw[32]	Bl Sb	At[b] Ep[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,002	BWBSdk1	02*	Pl	Sw Sb	At[b]	1000	500	400	7	12	20	Pl Others	1.20 0.60
19,003	BWBSdk1	03	Pl	Sw[28]	At[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,004	BWBSdk1	04	Pl Sb[50]	Sw[32]	At[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,005	BWBSdk1	05	Pl Sw	Bl Sb	At[a] Ep[a]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,006	BWBSdk1	06	Pl Sw[32]	Bl Sb	Acb[b] At[b] Ep[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,007	BWBSdk1	07	Pl[1] Sb[1] Sw[1,32]	Bl[50]	At[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,008	BWBSdk1	08	Sw[1,32]	Pl[1] Bl[50] Sb	Acb[a] At[b] Ep[b]	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,009	BWBSdk1	09*	Sb[1] Sw[1,32]	Pl[1]		400	200	200	4	9	20	Pl Others	1.20 0.60
19,010	BWBSdk1	10*	Sb[1] Sw[1,32]	Pl[1]		400	200	200	4	9	20	Pl Others	1.20 0.60
19,011	BWBSdk1	11*	Sb[1] Sw[1]	Pl[1]	Acb[b] At[b]	400	200	200	4	9	20	Pl Others	1.20 0.60
19,012	BWBSdk1	31	non- forested			-	-	-	-	-	-	-	-
19,013	BWBSdk1	32	non- forested			-	-	-	-	-	-	-	-
19,014	BWBSdk1	81	non- forested			-	-	-	-	-	-	-	-
19,021	**BWBSdk2**	01	Pl Sw[32]	Sb	At[b] Ep[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,022	BWBSdk2	02*	Pl	Sb Sw	At[b]	1000	500	400	7	12	20	Pl Others	1.20 0.60
19,023	BWBSdk2	03	Pl Sb[50]	Sw[32]	At[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,024	BWBSdk2	04	Pl Sb Sw	Lt	At[b]	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,025	BWBSdk2	05	Pl Sw[32]		At[a] Ep[a]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,026	BWBSdk2	06	Sw[1,32]	Sb Pl[1] Lt[1]	Acb[a] At[b] Ep[b]	1000	500	400	4	9	20	Pl Others	1.60 0.80
19,027	BWBSdk2	07*	Lt[1] Sb[1] Sw[1,32]	Pl[1]		400	200	200	4	9	20	Pl Others	1.20 0.60
19,028	BWBSdk2	08*	Lt[1] Sb[1] Sw[1,32]			400	200	200	4	9	20	All	0.60
19,029	BWBSdk2	31	non- forested			-	-	-	-	-	-	-	-
19,030	BWBSdk2	32	non- forested			-	-	-	-	-	-	-	-
19,031	BWBSdk2	81	non- forested			-	-	-	-	-	-	-	-
19,041	**CWHvh2**	01	Cw[48] Hw Yc[48]	Pl Yc[48]	Dr[b]	900	500	400	6	11	20	Hw, Pl Cw, Yc Others	2.00 1.50 1.40
19,042	CWHvh2	02*	Pl Cw[48] Yc[48]	Hw		400	200	200	3	8	20	Pl Others	1.40 1.00
19,043	CWHvh2	03	Cw[48] Hw Pl Yc[48]		Dr[b]	800	400	400	6	11	20	Hw Pl Others	1.80 1.40 1.00

I.D. #	BEC Classification		Regeneration Guide							Free Growing Guide			
			Species			Stocking (well-spaced/ha)			Regen Delay	Assessment		Min. Height**	
	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19,044	CWHvh2	04	Ba Hw Ss Cw[48]	Yc[48]	Dr[b]	900	500	400	6	11	20	Hw, Ss Cw, Yc Others	2.00 1.50 1.40
19,045	CWHvh2	05	Ba Cw[48] Ss	Hw[2] Yc[48]	Dr[b]	900	500	400	3	8	20	Hw, Ss Cw, Yc Others	2.00 1.50 1.40
19,046	CWHvh2	06	Ba Cw[48] Ss	Hw[2] Yc[48]	Dr[b]	900	500	400	3	8	20	Hw, Ss Cw, Yc Others	2.00 1.50 1.40
19,047	CWHvh2	07	Ba Cw[48] Ss	Hw[2] Yc[48]	Dr[b]	900	500	400	3	8	20	Hw, Ss Cw, Yc Others	2.00 1.50 1.40
19,048	CWHvh2	08	Cw[48] Ss	Ba Hw	Dr[a]	900	500	400	3	8	20	Hw, Ss Cw Others	2.00 1.50 1.40
19,049	CWHvh2	09	Ss[1] Cw[1,48]	Ba[1]	Dr[a]	900	500	400	3	8	20	Ss Cw Others	2.00 1.50 1.40
19,050	CWHvh2	10*	no conifers		Dr[b]	-	-	-	-	-	-	All	1.40
19,051	CWHvh2	11	Cw[1,48] Hw[1] Yc[1,48]	Pl[1]		800	400	400	3	8	20	Hw Pl Others	1.80 1.40 1.00
19,052	CWHvh2	12*	Cw[1,48] Pl[1] Yc[1,48]			400	200	200	3	8	20	Pl Others	1.40 1.00
19,053	CWHvh2	13	Cw[1,48] Yc[1,48]	Hw[1] Ss[1]	Dr[b]	800	400	400	3	8	20	Ss Hw Others	2.00 1.80 1.00
19,054	CWHvh2	14*	Ss	Cw[48] Pl Hw		400	200	200	3	8	20	Ss Hw Pl Others	2.00 1.80 1.40 1.00
19,055	CWHvh2	15	Ss	Cw[48] Hw		900	500	400	3	8	20	Hw, Ss Cw	2.00 1.50
19,056	CWHvh2	16*	Ss	Cw[48] Pl Hw		400	200	200	3	8	20	Ss Hw Pl Others	2.00 1.80 1.40 1.00
19,057	CWHvh2	17	Ss	Cw[48] Hw Yc[48]	Dr[b]	900	500	400	3	8	20	Hw, Ss Others	2.00 1.50
19,058	CWHvh2	18*	Cw[1,48] Ss[1]		Dr[b]	400	200	200	3	8	20	Ss Others	2.00 1.00
19,059	CWHvh2	19*	Cw[1,48] Ss[1]		Act[b] Dr[b]	400	200	200	3	8	20	Ss Others	2.00 1.00
19,060	CWHvh2	31	non- forested			-	-	-	-	-	-	-	-
19,061	CWHvh2	32	non- forested			-	-	-	-	-	-	-	-
19,062	CWHvh2	33	non- forested			-	-	-	-	-	-	-	-
19,071	**CWHvm1**	01	Hw[30] Ba[26] Cw	Ss[7,26,30,35,56,64]	Dr[b]	900	500	400	6	11	20	Hw, Ss Cw Others	2.00 1.50 1.40
19,072	CWHvm1	02*	Pl Cw Hw	Fd[22]		400	200	200	3	8	20	Hw, Pl Others	1.40 1.00
19,073	CWHvm1	03	Cw Hw	Pl Fd[22]	Dr[b]	800	400	400	6	11	20	Hw, Pl Others	1.40 1.00
19,074	CWHvm1	04	Hw[30] Ba Cw	Ss[30,35,56]	Dr[b]	900	500	400	3	8	20	Hw, Ss Cw Others	2.00 1.50 1.40
19,075	CWHvm1	05	Hw[30] Ba Cw	Ss[30,35,56]	Act[b] Dr[b]	900	500	400	3	8	20	Hw, Ss Cw Others	2.00 1.50 1.40
19,076	CWHvm1	06	Hw[30] Ba[26] Cw	Ss[7,26,30,35,56]	Dr[b]	900	500	400	6	11	20	Hw, Ss Cw, Yc Others	2.00 1.50 1.40

I.D. #	BEC Classification		Regeneration Guide							Free Growing Guide			
			Species			Stocking (well-spaced/ha)			Regen Delay	Assessment		Min. Height**	
	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19.077	CWHvm1	07	**Not in this area**										
19.078	CWHvm1	08	$Hw^{2,30}$ Ba Cw	$Ss^{30,35,56}$	Act^{a} Dr^{a}	900	500	400	3	8	20	Hw, Ss Cw Others	2.00 1.50 1.40
19.079	CWHvm1	09	Ba Cw		Act^{a} Dr^{a}	900	500	400	3	8	20	Hw Cw Others	2.00 1.50 1.40
19.080	CWHvm1	10	Cw^{1} $Ss^{1,30,35,56}$	Ba^{1}	Act^{a} Dr^{a}	900	500	400	3	8	20	Ss Cw Others	2.00 1.50 1.40
19.081	CWHvm1	11	no conifers		Act^{b} Dr^{b}	-	-	-	-	-	-	All	1.40
19.082	CWHvm1	12	Cw^{1} $Hw^{1,30}$ Yc^{1}	Pl^{1}		800	400	400	3	8	20	Hw, Pl Hm Others	1.40 0.80 1.00
19.083	CWHvm1	13*	Cw^{1} Pl^{1} Yc^{1}	$Hw^{1,30}$		400	200	200	3	8	20	Pl Others	1.40 1.00
19.084	CWHvm1	14	Cw^{1}	$Hw^{1,30}$ $Ss^{1,30}$ Yc^{1}	Act^{b} Dr^{b}	800	400	400	3	8	20	Hw, Ss Others	1.40 1.00
19.085	CWHvm1	31	non-forested			-	-	-	-	-	-	-	-
19.086	CWHvm1	32	non-forested			-	-	-	-	-	-	-	-
19.101	**CWHvm2**	01	Hw^{30} Ba Cw^{14} Yc	$Hm^{13,30}$ $Ss^{7,30}$		900	500	400	6	11	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
19.102	CWHvm2	02*	Pl Cw Yc	Hw^{30}		400	200	200	3	8	20	Hw Pl Others	1.80 1.40 1.00
19.103	CWHvm2	03	Cw^{14} Hw^{30}	$Hm^{13,30}$ Pl Yc		800	400	400	6	11	20	Hw Pl Others	1.80 1.40 1.00
19.104	CWHvm2	04	**Not in this area**										
19.105	CWHvm2	05	Hw^{30} Ba Cw^{14} Yc^{13}	Ss^{30} $Hm^{13,30}$		900	500	400	3	8	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
19.106	CWHvm2	06	Hw^{30} Ba Cw^{14} Yc	$Hm^{13,30}$ $Ss^{7,30}$		900	500	400	6	11	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
19.107	CWHvm2	07	**Not in this area**			900	500	400	3	8	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
19.108	CWHvm2	08	$Hw^{2,30}$ Ba Cw^{14} Yc	$Hm^{13,30}$ $Ss^{30,35}$		900	500	400	3	8	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
19.109	CWHvm2	09	Cw^{1} $Hw^{1,30}$ Yc^{1}	Pl^{1} $Hm^{1,30}$		800	400	400	3	8	20	Hw Pl Hm Others	1.80 1.40 0.80 1.00
19.110	CWHvm2	10*	Pl^{1} Yc^{1}	Hm^{30}		400	200	200	3	8	20	Pl Yc Hm	1.40 1.00 0.80
19.111	CWHvm2	11	Cw^{1} Yc^{1}	$Hm^{1,30}$ $Hw^{1,30}$ $Ss^{1,30}$		800	400	400	3	8	20	Hw Ss Others	1.80 1.40 1.00
19.112	CWHvm2	31	non-forested			-	-	-	-	-	-	-	-
19.113	CWHvm2	32	non-forested			-	-	-	-	-	-	-	-
19.114	CWHvm2	51	non-forested			-	-	-	-	-	-	-	-

I.D. #	BEC Classification		Regeneration Guide							Free Growing Guide			
			Species			Stocking (well-spaced/ha)			Regen Delay	Assessment		Min. Height**	
	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19,121	**CWHwm**	01	Ba[16,50] Hw[30] Ss[30,56]	Cw[16] Hm[12,13,30] Yc[12,13]	Dr[b]	900	500	400	6	11	20	Hw, Ss Hm Others	2.00 1.00 1.40
19,122	CWHwm	02	Cw[16,50] Hw[30] Pl	Hm[12,13,30]	Dr[b]	900	500	400	6	11	20	Hw, Pl Ss Hm Others	2.00 2.00 1.00 1.40
19,123	CWHwm	03	Ba[16,50] Ss[30,56] Hw[30]	Cw[16] Yc[12,13]	Act[b] Dr[b]	900	500	400	3	8	20	Hw, Ss Others	2.00 1.40
19,124	CWHwm	04	Ss[30,56] Hw[30]	Ba[16] Cw[16] Yc[12,13]	Act[b] Dr[a]	900	500	400	3	8	20	Hw, Ss Others	2.00 1.40
19,125	CWHwm	05	Ba[16,50] Ss[30,56] Hw[30]	Cw[16]	Act[a] Dr[a]	900	500	400	3	8	20	Hw, Ss Others	2.00 1.40
19,126	CWHwm	06	Ba[1,16,50] Ss[1,30,56]	Cw[1,16]	Act[a] Dr[a]	900	500	400	3	8	20	Ss Others	2.00 1.40
19,127	CWHwm	07*	no conifers			-	-	-	-	-	-	-	-
19,128	CWHwm	8*	Cw[1,16] Pl[1] Yc[1] Hw[1,30]	Hm[12,13,30]	Act[b] Dr[b]	900	500	400	6	11	20	Hw, Pl Hm Others	2.00 1.00 1.40
19,129	CWHwm	09	Cw[1,16,50] Ss[1,30,56]	Yc[1] Hw[1,30] Hm	Act[b] Dr[b]	800	400	400	3	8	20	Hw, Ss Others	1.40 1.00
19,130	CWHwm	10*	Pl[1] Yc[1]	Cw[1,16] Hw[30]		400	200	200	3	8	20	Pl Others	1.40 1.00
19,131	CWHwm	31	non-forested			-	-	-	-	-	-	-	-
19,132	CWHwm	32	non-forested			-	-	-	-	-	-	-	-
19,133	CWHwm	51	non-forested			-	-	-	-	-	-	-	-
19,141	**CWHws1**	01	Hw[30] Ba Cw	Pl Sxs[30,35,56]	Dr[b]	900	500	400	6	11	20	Hw, Pl Sxs Others	2.00 2.00 1.40
19,142	CWHws1	02*	Pl Hw[30]	Cw		600	400	400	6	11	20	Hw, Pl Others	1.40 1.00
19,143	CWHws1	03	Hw Pl	Cw		900	500	400	6	11	20	Hw, Pl Others	2.00 1.40
19,144	CWHws1	04	Hw[2,30] Ba Cw	Sxs[30,35,56]	Act[b] Dr[b]	900	500	400	3	8	20	Hw, Pl Sxs Others	2.00 2.00 1.40
19,145	CWHws1	05	Hw[30] Ba Cw	Sxs[7,30,35,56]	Dr[b]	900	500	400	6	11	20	Hw,Sxs Others	2.00 1.40
19,146	CWHws1	06	Hw[2,30] Ba Cw	Sxs[30,35,56]	Act[b] Dr[a]	900	500	400	3	8	20	Hw,Sxs Others	2.00 1.40
19,147	CWHws1	07	Hw[30] Ba Cw	Sxs[30,35,56]	Act[a]	900	500	400	3	8	20	Hw,Sxs Others	2.00 1.40
19,148	CWHws1	08	Ba[1] Cw[1]	Hw[30] Sxs[1,30,35,56]	Act[a] Dr[a]	900	500	400	3	8	20	Sxs Others	2.00 1.40
19,149	CWHws1	09*	no conifers		Act[b] Dr[b]	-	-	-	-	-	-	All	1.40
19,150	CWHws1	10*	Pl[1]	Cw[1] Hw[30]		400	200	200	3	8	20	Hw, Pl Cw	1.40 1.00
19,151	CWHws1	11	Cw[1] Sxs[1,30,56]	Ba[1] Hw[1,30]	Act[b] Dr[b]	800	400	400	3	8	20	Hw,Sxs Others	1.40 1.00
19,152	CWHws1	31	non-forested			-	-	-	-	-	-	-	-
19,153	CWHws1	32	non-forested			-	-	-	-	-	-	-	-
19,161	**CWHws2**	01	Sxs30 Hw30 Ba Cw14	Bl[17] Pl	Dr[b]	900	500	400	6	11	20	Pl Hw Others	2.00 1.30 1.00
19,162	CWHws2	02*	Pl Hw[30]	Cw Hm[13,30]		600	400	400	6	11	20	Pl Others	1.40 0.80
19,163	CWHws2	03	Hw Pl	Hm[13,30] Cw	Dr[b]	900	500	400	6	11	20	Pl Hw Others	2.00 1.30 1.00

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	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19,164	CWHws2	04	Sxs[30] Hw[30] Ba Cw[14]	Bl[12] Hm[13,30]	Act[b] Dr[b]	900	500	400	3	8	20	Hw	1.30
												Others	1.00
19,165	CWHws2	05	Sxs[7,30] Hw[30] Ba Cw[14]	Bl[12]	Dr[b]	900	500	400	6	11	20	Hw	1.30
												Others	1.00
19,166	CWHws2	06	Sxs[30] Hw[30] Ba Cw[14]	Bl[12]	Act[b] Dr[b]	900	500	400	3	8	20	Hw	1.30
												Others	1.00
19,167	CWHws2	07	Sxs[30] Hw[30] Ba Cw	Bl[12]	Act[a] Dr[a]	900	500	400	3	8	20	Hw	1.30
												Others	1.00
19,168	CWHws2	08	Sxs[30] Hw[30] Ba[1] Cw[1]	Bl[12]	Act[a] Dr[a]	900	500	400	3	8	20	All	1.00
19,169	CWHws2	09	no conifers		Act[b] Dr[b]	-	-	-	-	-	-	All	1.40
19,170	CWHws2	10*	Pl[1]	Cw[1] Hm[30] Hw[30]		400	200	200	3	8	20	Pl	1.40
												Others	0.80
19,171	CWHws2	11	Cw[1] Sxs[1,30]	Hw[1,30] Ba[1]	Act[b] Dr[b]	800	400	400	3	8	20	All	0.80
19,172	CWHws2	31	non-forested			-	-	-	-	-	-	-	-
19,173	CWHws2	32	non-forested			-	-	-	-	-	-	-	-
19,174	CWHws2	51	non-forested			-	-	-	-	-	-	-	-
19,181	**ESSFmc**	01	Bl Sx	Pl[34]		1200	700	600	7	15	20	Pl	1.60
												Others	0.80
19,182	ESSFmc	02*	Pl	Bl Sx		1000	500	400	7	15	20	Pl	1.20
												Others	0.60
19,183	ESSFmc	03*	Pl	Bl Sx		1000	500	400	7	15	20	Pl	1.20
												Others	0.60
19,184	ESSFmc	04	Pl Bl Sx			1200	700	600	7	15	20	Pl	1.60
												Others	0.80
19,185	ESSFmc	05	Bl Sx	Pl[34]		1200	700	600	4	12	20	Pl	1.60
												Others	0.80
19,186	ESSFmc	06	Bl Sx	Pl[34]		1200	700	600	4	12	20	Pl	1.60
												Others	0.80
19,187	ESSFmc	07	Bl Sx[32]			1200	700	600	4	12	20	Pl	1.60
												Others	0.80
19,188	ESSFmc	08*	Bl Sx[32]			1000	500	400	4	12	20	All	0.60
19,189	ESSFmc	09	Bl[1] Sx[1,32]			1000	500	400	4	12	20	All	0.60
19,190	ESSFmc	10	Bl[1] Sx[1,32]			1000	500	400	4	12	20	All	0.60
19,191	ESSFmc	31	non-forested			-	-	-	-	-	-	-	-
19,192	ESSFmc	51	non-forested			-	-	-	-	-	-	-	-
19,201	**ESSFmk**	01	Bl Se	Ba[17] Hm Pl[34]		1200	700	600	7	15	20	Pl	1.60
												Others	0.80
19,202	ESSFmk	02*	Pa Pl	Bl Hm Se		1000	500	400	7	15	20	Pl	1.20
												Others	0.60
19,203	ESSFmk	03*	Pa Pl	Bl Hm Se Ba[17]		1200	700	600	7	15	20	Pl	1.60
												Others	0.80
19,204	ESSFmk	04	Bl Se	Ba[17] Hm Pl[34]		1200	700	600	4	12	20	Pl	1.60
												Others	0.80
19,205	ESSFmk	05	Bl Se[32]	Hm Ba[17]		1200	700	600	4	12	20	Pl	1.60
												Others	0.80
19,206	ESSFmk	06	Bl[1] Se[1,32]	Hm Ba		1000	500	400	4	12	20	All	0.80
19,207	ESSFmk	07	Bl[1] Se[1,32]	Ba		1000	500	400	4	12	20	All	0.80
19,208	ESSFmk	31	non-forested			-	-	-	-	-	-	-	-
19,209	ESSFmk	51	non-forested			-	-	-	-	-	-	-	-
19,221	**ESSFmv3**	01	Bl Se	Pl[34]		1200	700	600	4	12	20	Pl	1.60
												Others	0.80
19,222	ESSFmv3	02*	Pl[34]	Se[28] Bl[28]		1000	500	400	4	12	20	Pl	1.20
												Others	0.60
19,223	ESSFmv3	03	Bl Se	Sb Pl[34]		1000	500	400	4	12	20	Pl	1.20
												Others	0.60
19,224	ESSFmv3	04	Bl Se	Pl[34]		1200	700	600	4	12	20	Pl	1.60
												Others	0.80

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	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19.225	ESSFmv3	05	Bl Se	Pl[34]		1200	700	600	4	12	20	Pl Others	1.60 0.80
19.226	ESSFmv3	06	Bl Sx	Pl[34]		1200	700	600	7	12	20	Pl Others	1.60 0.80
19.227	ESSFmv3	07	Bl[1] Se[1,32]	Pl[1,34]		1000	500	400	4	12	20	Pl	1.20
19.241	**ESSFwv**	01	Bl Se	Hm Hw Pl[34]		1200	700	600	7	15	20	Pl Others	1.60 0.80
19.242	ESSFwv	02*	Pl	Bl Hm Se		1000	500	400	7	15	20	Pl Others	1.20 0.60
19.243	ESSFwv	03*	Pl	Bl Hm Se Hw		1200	700	600	7	15	20	Pl Others	1.60 0.80
19.244	ESSFwv	04	Pl Bl	Se Hm		1200	700	600	7	15	20	Pl Others	1.60 0.80
19.245	ESSFwv	05	Bl Se	Hm Hw Pl[34]		1200	700	600	4	12	20	Pl Others	1.60 0.80
19.246	ESSFwv	06	Bl Se[32]	Hm Hw		1200	700	600	4	12	20	Pl Others	1.60 0.80
19.247	ESSFwv	07*	Bl Se[32]	Hm Hw		1000	500	400	4	12	20	All	0.60
19.248	ESSFwv	08	Bl[1] Se[1,32]			1000	500	400	4	12	20	All	0.60
19.249	ESSFwv	09	Bl[1] Se[1,32]			1000	500	400	4	12	20	All	0.60
19.250	ESSFwv	31	non-forested			-	-	-	-	-	-	-	-
19.251	ESSFwv	51	non-forested			-	-	-	-	-	-	-	-
19.261	**ICHmc1**	01	Bl[29] Ba[50] Hw[32] Sx[46] Ba[50]	Pl	At[b] Ep[b]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.262	ICHmc1	02*	Pl	Bl Hw[32]	At[a]	1000	500	400	7	12	20	Pl Others	1.40 0.80
19.263	ICHmc1	03	Bl[29] Ba[50] Hw[32] Sx[35,56]	Pl	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.264	ICHmc1	04	Bl[29] Ba[50] Sx[35,56] Hw[32]	Pl	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.265	ICHmc1	05	Ba[50] Sx[1,35,56] Bl[1,29]		Act[a] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.266	ICHmc1	06	Ba[50] Sx[1,56] Bl[1,29]	Hw[1,32]	Act[b]	1000	500	400	4	9	20	All	0.80
19.267	ICHmc1	31	non-forested			-	-	-	-	-	-	-	-
19.281	**ICHmc1a**	01	Ba[7] Hw[32] Sx[56]	Bl[50] Pl	At[b] Ep[b]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.282	ICHmc1a	02	Hw[32] Ba Sx[35,56]	Bl[50] Pl	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.283	ICHmc1a	03	Hw[32] Ba Sx[35,56]	Bl[50]Pl		1200	700	600	4	9	20	Pl Others	2.00 1.00
19.301	**ICHmc2**	01	Hw[32] Sx[56] Cw[32]	Ba[50] Pl Bl[29]	At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.302	ICHmc2	02*	Pl	Bl Hw Ba[50]	At[b]	1000	500	400	7	12	20	Pl Others	1.40 0.80
19.303	ICHmc2	03	Cw[32] Hw[32] Sx[35,56]	Bl[29] Pl Ba[50]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.304	ICHmc2	04	Cw[32] Sx[35,56]	Bl[29] Hw[32] Pl Ba[50]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.305	ICHmc2	05	Cw[1,32] Sx[1,35,56]	Ba[50] Bl[1,29] Hw[1,32] Pl[1]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.306	ICHmc2	06	Cw[1,32] Sx[1,35,56]	Ba[50] Bl[1,29] Hw[1,32]	Act[a] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19.307	ICHmc2	07	Ba[50] Bl[1,29] Sx[1,56] Cw[1,32]	Hw[1,32]	Act[b] At[b] Ep[b]	1000	500	400	4	9	20	Pl Others	1.40 1.00

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	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19,308	ICHmc2	08*	Sb[1] Sx[1,32,56]	Pl[1]		400	200	200	4	9	20	Pl Others	1.40 0.80
19,309	ICHmc2	31	non-forested			-	-	-	-	-	-	-	-
19,310	ICHmc2	32	non-forested			-	-	-	-	-	-	-	-
19,311	ICHmc2	51	Pl[71] Hw	Bl[28,29] Sx[28,56] Ba[50]	At[b] Ep[b]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,312	ICHmc2	52	Hw[32] Sx[56] Cw[32]	Pl Bl[29] Ba[50]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,313	ICHmc2	53	Hw[32] Sx[56] Cw[32]	Pl Bl[29] Ba[50]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,314	ICHmc2	54	Cw[32] Sx[56]	Bl[29] Hw[32] Pl Ba[50]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl	2.00
19,321	**ICHvc**	01	Bl Hw[32]	Hm[50] Sx[34,35,56]	Act[b] At[b] Ep[b]	1200	700	600	4	9	20	All	1.00
19,322	ICHvc	02	Bl Hw[32]	Hm[50] Pl[3,9] Sx[34,56]	At[b] Ep[b]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,323	ICHvc	03	Bl Sx[34,35,56]	Hw	Act[b] At[b] Ep[b]	1200	700	600	4	9	20	All	1.00
19,324	ICHvc	04	Bl[1] Sx[1,34,35,56]		Act[a] At[b] Ep[b]	1200	700	600	4	9	20	All	1.00
19,325	ICHvc	05	Bl[1] Sx[1,32,34,35,56]		Act[a] At[a]	1200	700	600	4	9	20	All	1.00
19,326	ICHvc	06	Bl[1] Sx[1,32,34,56]		Act[b] At[b] Ep[b]	1000	500	400	4	9	20	All	0.80
19,327	ICHvc	31	non-forested			-	-	-	-	-	-	-	-
19,328	ICHvc	51*	Bl Sx[34,56]			1000	500	400	3	8	20	All	0.80
19,329	ICHvc	52*	Bl Sx[34,56]			400	200	200	3	8	20		
19,341	**ICHwc**	01	Bl Hw[32] Sx	Pl	Act[b] At[b] Ep[b]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,342	ICHwc	02*	Pl	Bl Hw	At[b]	1000	500	400	7	12	20	Pl Others	1.40 0.80
19,343	ICHwc	03	Bl Hw[32] Pl Sx[28]		At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,344	ICHwc	04	Bl Sx	Hw[32]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,345	ICHwc	05	Bl Sx	Hw[32]	Act[b] At[a] Ep[a]	1200	700	600	4	9	20	All	1.00
19,346	ICHwc	06	Bl[1] Sx[1]	Hw[1,32]	Act[a] At[a] Ep[a]	1200	700	600	4	9	20	All	1.00
19,347	ICHwc	07	Sx[1] Bl[1]	Hw[1,32] Pl[1]		1000	500	400	4	9	20	Pl Others	1.40 0.80
19,348	ICHwc	08	Bl[1] Sx[1]	Hw[1,32]	Act[b] At[b] Ep[b]	1000	500	400	4	9	20	All	0.80
19,349	ICHwc	31	non-forested			-	-	-	-	-	-	-	-
19,350	ICHwc	32	non-forested			-	-	-	-	-	-	-	-
19,351	ICHwc	51	Bl Sx			1000	500	400	4	9	20	All	0.80
19,352	ICHwc	52	Bl[1] Sx[1]			400	200	200	3	8	20	All	0.80
19,361	**MHmm1**	01	Ba Hm Yc			900	500	400	7	15	20	All	1.00
19,362	MHmm1	02*	Hm Yc	Ba		800	400	400	4	12	20	All	0.80
19,363	MHmm1	03	Ba Hm Yc			900	500	400	4	12	20	All	1.00
19,364	MHmm1	04	Ba Hm Yc			900	500	400	7	15	20	All	1.00
19,365	MHmm1	05	Ba Yc Hm			900	500	400	4	12	20	All	1.00
19,366	MHmm1	6*	Hm[1] Yc[1]			800	400	400	7	15	20	All	0.80
19,367	MHmm1	7*	Hm[1] Ba[1] Yc[1]			900	500	400	4	12	20	All	1.00
19,368	MHmm1	08*	Hm[1] Yc[1]	Hw[1,14] Ba[1]		400	200	200	4	12	20	All	0.80
19,369	MHmm1	09*	Yc[1] Hm[1]	Ba[1] Hw[1,14]		800	400	400	4	12	20	All	0.80

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	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19,370	MHmm1	31	non-forested			-	-	-	-	-	-	-	-
19,371	MHmm1	51	non-forested			-	-	-	-	-	-	-	-
19,381	**MHmm2**	01	Ba Hm	Yc^{17,50} Bl^{50}		900	500	400	7	15	20	All	1.00
19,382	MHmm2	02*	Hm	Yc^{17,50} Ba Bl^{50}		800	400	400	4	12	20	All	0.80
19,383	MHmm2	03	Ba Hm	Yc^{17,50} Bl^{50}		900	500	400	4	12	20	All	1.00
19,384	MHmm2	04	Ba Hm	Yc^{17,50} Bl^{50}		900	500	400	7	15	20	All	1.00
19,385	MHmm2	05	Ba Hm	Yc^{17,50} Bl^{50}		900	500	400	4	12	20	All	1.00
19,386	MHmm2	06*	Hm^{1}	Yc^{17,50}		800	400	400	7	15	20	All	1.00
19,387	MHmm2	07*	Ba^{1}	Yc^{1,17,50} Hm^{1}		900	500	400	4	12	20	All	1.00
19,388	MHmm2	08*	Hm^{1}	Ba Bl^{1,50} Yc^{1,17,50}		400	200	200	4	12	20	All	0.80
19,389	MHmm2	09*	Hm^{1}	Ba^{1} Yc^{1,17,50}		800	400	400	4	12	20	All	0.80
19,390	MHmm2	31	non-forested			-	-	-	-	-	-	-	-
19,391	MHmm2	51	non-forested			-	-	-	-	-	-	-	-
19,401	**MHwh1**	01	Ba Hm Yc	Cw^{14} Hw^{14} Ss^{14}		900	500	400	7	15	20	All	1.00
19,402	MHwh1	02*	Hm Yc	Cw^{14}		400	200	200	4	12	20	All	0.80
19,403	MHwh1	03	Hm Yc	Cw^{14} Ss^{14}		900	500	400	7	15	20	All	1.00
19,404	MHwh1	04	Hm Yc	Cw^{14} Ba Hw^{14}		900	500	400	7	15	20	All	1.00
19,405	MHwh1	05	Ba Yc	Cw^{14} Hm Hw^{14} Ss^{14}		900	500	400	4	12	20	All	1.00
19,406	MHwh1	06*	Hm^{1} Yc^{1}	Ba^{1} Ss^{1,14}		800	400	400	7	15	20	All	0.80
19,407	MHwh1	07*	Ba^{1} Yc^{1}	Cw^{14} Hm^{1} Ss^{1,14}		900	500	400	4	12	20	All	1.00
19,408	MHwh1	08*	Hm^{1} Yc^{1}	Ba^{1} Hw^{1,14}		400	200	200	4	12	20	All	0.80
19,409	MHwh1	09*	Yc^{1}	Cw^{1,14} Hw^{1,14} Ba Hm^{1}		800	500	400	4	12	20	All	0.80
19,410	MHwh1	31	non-forested			-	-	-	-	-	-	-	-
19,421	**SBPSmc**	01	Pl	Sb Sx	At^{b}	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,422	SBPSmc	02*	Pl	Sb Sx	At^{b}	1000	500	400	7	12	20	Pl Others	1.20 0.60
19,423	SBPSmc	03	Pl	Sb Sx	At^{b}	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,424	SBPSmc	04*	Pl Sb Sx^{32}		At^{b}	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,425	SBPSmc	05	Sx^{1,32}	Sb Pl^{1}	Act^{b}	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,426	SBPSmc	06	Sx^{1,32}	Sb Pl^{1}	Act^{b}	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,427	SBPSmc	07*	Pl^{1} Sb^{1} Sx^{1,32}			400	200	200	4	9	20	Pl Others	1.20 0.60
19,428	SBPSmc	31	non-forested			-	-	-	-	-	-	-	-
19,429	SBPSmc	32	non-forested			-	-	-	-	-	-	-	-
19,441	**SBSdk**	01	Pl Sx	Fd^{9,18}	At^{a} Ep^{a}	1200	700	600	7	12	20	Pl Fd Others	2.00 1.40 1.00
19,442	SBSdk	02*	Pl	Sx^{28}	At^{b} Ep^{b}	1000	500	400	7	12	20	Pl Others	1.40 0.80
19,443	SBSdk	03*	Pl	Sx^{28} Sb^{28}	At^{a}	1200	700	600	7	12	20	Pl Others	2.00 1.00
19,444	SBSdk	04	Fd Pl Sx^{28}		At^{b} Ep^{a}	1200	700	600	7	12	20	Pl Fd Others	2.00 1.40 1.00

I.D. #	BEC Classification		Regeneration Guide							Free Growing Guide			
			Species			Stocking (well-spaced/ha)			Regen Delay	Assessment		Min. Height**	
	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Max yrs)	Earliest (yrs)	Latest (yrs)	Species	Ht (m)
19,445	SBSdk	05	Pl Sx[28]	Fd[9,18]	At[a] Ep[a]	1200	700	600	7	12	20	Pl Fd Others	2.00 1.40 1.00
19,446	SBSdk	06	Pl Sx	Fd[9,18]	Act[a] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,447	SBSdk	07	Sx[1,32]	Pl[1]	Act[b] At[b] Ep[b]	1000	500	400	4	9	20	Pl Others	1.40 0.80
19,448	SBSdk	08	Sx[1,32]		Act[a] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,449	SBSdk	09*	Pl[1] Sb[1]	Sx[1]		400	200	200	4	9	20	Pl Others	1.40 0.80
19,450	SBSdk	10*	Pl[1] Sb[1] Sx[1,32]			400	200	200	4	9	20	Pl Others	1.40 0.80
19,451	SBSdk	31	non-forested			-	-	-	-	-	-	-	-
19,452	SBSdk	32	non-forested			-	-	-	-	-	-	-	-
19,453	SBSdk	81	non-forested			-	-	-	-	-	-	-	-
19,454	SBSdk	82	non-forested			-	-	-	-	-	-	-	-
19,461	**SBSmc2**	01	Pl Sx	Bl[29]	At[a]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,462	SBSmc2	02*	Pl	Bl Sx[32]	At[b]	1000	500	400	7	12	20	Pl Others	1.20 0.60
19,463	SBSmc2	03	Pl Sx[22]	Bl[29] Sb	At[b]	1200	700	600	7	12	20	Pl Others	1.60 0.80
19,464	SBSmc2	04	**Not in this area**		At[b]	1200	700	600	4	9	20	Pl Others	1.60 0.80
19,465	SBSmc2	05	Pl Sx	Bl[29]	Act[a] At[a]	1200	700	600	4	9	20	Pl Others	1.60 0.80
19,466	SBSmc2	06	Pl Sx	Bl[29]	Act[b] At[a]	1200	700	600	4	9	20	Pl Others	1.60 0.80
19,467	SBSmc2	07*	Pl Sb Sx[32]	Bl	At[b]	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,468	SBSmc2	08	Pl Sx	Bl[29]	Act[b] At[a]	1200	700	600	4	9	20	Pl Others	1.60 0.80
19,469	SBSmc2	09	Sx Bl[29]	Pl	Act[b] At[a]	1200	700	600	4	9	20	Pl Others	1.60 0.80
19,470	SBSmc2	10	Sx[1,32] Bl[1,29]	Pl[1]	Act[b] At[b]	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,471	SBSmc2	11	**Not in this area**		Act[b]	1000	500	400	4	9	20	Pl Others	1.20 0.60
19,472	SBSmc2	12*	Sb[1] Sx[1,22]	Pl[1] Bl[1]		400	200	200	4	9	20	Pl Others	1.20 0.60
19,473	SBSmc2	31	non-forested			-	-	-	-	-	-	-	-
19,481	**SBSwk3**	01	Pl Sx	Bl[29]	Act[a] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,482	SBSwk3	02	Pl	Bl[29] Sx[28]		1000	500	400	7	12	20	Pl Others	1.40 0.80
19,483	SBSwk3	03	Fd[16] Pl Sx[28]		At[b] Ep[b]	1200	700	600	7	12	20	Pl Fd Others	2.00 1.40 1.00
19,484	SBSwk3	04	Pl Sx	Bl	At[a] Ep[a]	1200	700	600	7	12	20	Pl Others	2.00 1.00
19,485	SBSwk3	05	Pl	Sb Sx	At[b]	1200	700	600	7	12	20	Pl Others	2.00 1.00
19,486	SBSwk3	06	Pl Sx	Bl[29]	Act[a] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,487	SBSwk3	07	Sx[32]	Pl Bl[29]	Act[a] At[a] Ep[a]	1200	700	600	4	9	20	Pl Others	2.00 1.00
19,488	SBSwk3	08	Sx[1,32]	Pl[1] Bl[1,29]	Act[a] At[a]	1000	500	400	4	9	20	Pl Others	1.40 0.80

* These site series are sensitive to logging – avoid targeting them for harvest

Table A2: Stocking Standards for Grizzly Bear and Moose Winter Range Site Series

Location		Species		Stocking (well spaced)			Delay	Timing		Maximum Density		
BEC Zone/ Subzone/ Variant	Site Series	Preferred (P)	Acceptable (A)	Target P&A (sph)	Min P&A (sph)	Min P (sph)	Max (yrs)	Earliest (yrs)	Latest (yrs)	Pre Space (Max sph)	Post Spacing (well-spaced) (Min sph)	(Max sph)
19,550	**Grizzly Bear Habitat, Moose Winter Range - Devil's club**											
CWHvm1	08	Cw Ss^{30,35,56,64} Hw^{2,30} Ba	Hm	600	400	400	3	8	14	660	400	660
CWHvm2	08	Cw^{14} Ss^{30,35} Hw^{2,30} Ba	Hm	600	400	400	3	8	14	660	400	660
19,555	**Grizzly Bear Habitat, Moose Winter Range - Devil's club**											
CWHws1	06	Cw Ss^{30,35,56,64} Hw^{2,30} Ba	Ac[b]	600	400	400	3	8	20	660	400	660
CWHws2	06	Cw^{14} Ss^{30,64} Hw^{2,30} Ba	Ac[b] Bl^{12}	600	400	400	3	8	20	660	400	660
19,560	**Grizzly Bear Habitat, Moose Winter Range - Skunk cabbage**											
CWHvm1	14	Cw^{1} Yc^{1}	Pl^{1} Ba^{1} Hw^{1,30} Ss^{1,30}	400	200	200	3	8	14	440	200	440
CWHvm2	11	Cw^{1} Yc^{1}	Ba Hw^{1,30} Ss^{1,30} Hm^{1,30}	400	200	200	3	8	14	440	200	440
19,565	**Grizzly Bear Habitat, Moose Winter Range - Skunk cabbage**											
CWHws1	11	Cw^{1} Sx^{1,30,56}	Ba^{1} Hw^{1,30} Ac[b]	400	200	200	3	8	20	440	200	440
CWHws2	11	Cw^{1} Sx^{1,30}	Ba^{1} Hw^{1,30} Ac[b]	400	200	200	3	8	20	440	200	440
19,570	**Grizzly Bear Habitat, Moose Winter Range - Salmonberry & red-osier dogwood**											
CWHvm1	09	Ba^{1} Cw^{1} Hw^{2,30} Ss^{30,35}		500	200	200	3	8	14	550	200	550
CWHvm1	10	Cw^{1} Ss^{1,30,35,56}	Ba^{1}	500	200	200	3	8	14	550	200	550
19,575	**Grizzly Bear Habitat, Moose Winter Range - Salmonberry & red-osier dogwood**											
CWHws1	07	Ba Cw Hw Sx^{30,35,56}	Ac[a]	500	200	200	3	8	20	550	200	550
CWHws1	08	Ba^{1} Cw^{1} Hw	Ac[a] Sx^{1,30,35,56}	500	200	200	3	8	20	550	200	550
CWHws2	07	Ba Cw Hw Sx^{30,35,56}	Ac[a] Bl^{12}	500	200	200	3	8	20	550	200	550
CWHws2	08	Ba^{1} Cw^{1} Hw	Ac[a] Bl^{12} Sx^{1,30,35,56}	500	200	200	3	8	20	550	200	550

Tree Height: Same as the stocking standards for the ecosystem as described in Table A1.

Minimum Inter-tree Spacing: To allow for cluster planting, the minimum inter-tree spacing is set at one (1) metre for the Grizzly Bear/ Moose Winter Range stocking standards. The minimum inter tree spacing also applies within clusters when cluster planting is identified as a stand level strategy in the site plan.

Well-Spaced stems: "Well spaced" does not apply to forage gaps when cluster planting is identified as a stand level strategy in the site plan.

Target post-spacing density: The target post spacing density is 100 stems/ ha less than the post spacing maximum density.

Table A3: Multiple-layer Stocking Standards

Target from Table A1 standards (stems/ha)	Layer**	Stocking (well-spaced stems/ ha)		
		Target preferred (p) & acceptable (a)	Minimum p & a	Minimum p
1200	1	600	300	250
	2	800	400	300
	3	1000	500	400
	4	1200	700	600
1000	1	400	200	200
	2	600	300	250
	3	800	400	300
	4	1000	500	400
900	1	400	200	200
	2	500	300	250
	3	700	400	300
	4	900	500	400
800	1	300	150	150
	2	400	200	200
	3	600	300	300
	4	800	400	400
600	1	300	150	150
	2	400	200	200
	3	500	300	300
	4	600	400	400
400	1	200	100	100
	2	300	125	125
	3	300	150	150
	4	400	200	200

Stand Layer Definition

Layer 1	Mature	trees >= 12.5 cm dbh
Layer 2	Pole	trees 7.5 cm to 12.4 cm dbh
Layer 3	Sapling	trees >= 1.3 m height to 7.4 cm dbh
Layer 4	Regeneration	trees < 1.3 m height

Footnotes to "Preferred" or "Acceptable" species within Tables A1 and A2			
1	Elevated microsites are preferred	32	Limited by growing-season frosts
2	suitable on thick forest floors	34	Risk of snow damage
3	Restricted to coarse-textured soils	35	Risk of weevil damage
7	Restricted to nutrient-medium sites	44	Suitable in areas with stronger maritime influence
9	Restricted to southerly aspects	50	Restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
12	suitable on cold air drainage sites	56	Spruce content restricted to < 20% well- spaced and free growing trees on a standards unit due to leader weevil.
14	Restricted to lower elevations of biogeoclimatic unit	64	North Coast forest district - species is preferred in North Coast forest district only
17	Restricted to western portion of biogeoclimatic unit in region		
23	Restricted to trial use		**Broadleaf Management Constraints**
29	Risk of heavy browsing by moose	a	productive, reliable, and feasible regeneration option
30	risk of porcupine damage	b	limited in productivity, reliability and/or feasibility
Note: The following do not exist as footnotes: 4-6, 8, 10, 11, 12, 15, 16, 18-22, 24-28, 31, 33, 36-43, 45-49, 51-55, 57-63			

BEC - Biogeoclimatic Ecosystem Classification	
BWBS Boreal White and Black Spruce zone	**ICH Interior Cedar-Hemlock zone**
dk1 dry cool subzone, Stikine variant	mc1 moist cold subzone, Nass variant
dk2 dry cool subzone, Liard variant	m1a moist cold subzone, Nass variant – Amabalis fir phase
CWH Coastal Western Hemlock zone	mc2 moist cold subzone, Hazelton variant
vh2 very wet hypermaritime subzone, central variant	vc very wet cold subzone
vm1 very wet maritime subzone, submontane variant	wc wet cold subzone
vm2 very wet maritime subzone, montane variant	**MH Mountain Hemlock zone**
wm wet maritime subzone	mm1 moist maritime subzone, windward variant
ws1 wet submaritime subzone, submontane variant	mm2 moist maritime subzone, leeward variant
ws2 wet submaritime subzone, montane variant	wh1 wet hypermaritime subzone – windward variant
ESSF Engelmann Spruce Subalpine Fir zone	**SBS Sub-Boreal Spruce zone**
mc moist cold subzone	mc moist cold subzone
mv3 moist very cold subzone, Omineca variant	mc2 moist cold subzone, Babine variant
mk moist cool subzone	dk dry cool subzone
wv wet very cold subzone	wk3 wet cold subzone, Takla variant

Conifer Tree Species		Broadleaf Tree Species
"Ba" means amabalis fir	"Pl" means Lodgepole pine;	"Act" means black cottonwood;
"Bl" means subalpine fir;	"Sb" means black spruce;	"At" means trembling aspen;
"Cw" means western red cedar;	"Se" means Engelmann spruce;	"Ep" means common paper birch;
"Hm" means mountain hemlock;	"Sx" means hybrid or interior spruce;	
"Hw" means western hemlock;	"Yc" means yellow cedar.	

The terms Ss, Sx and Sxs are used interchangeably as the terms are a reflection of the seed registration and not indicative of the genetic material.